JPRS-UMA-94-013 13 April 1994



# JPRS Report

# **Central Eurasia**

Military Affairs

# Central Eurasia

# Military Affairs

JPRS-UMA-94	4-013 CONTENTS	13 April	1994
RUSSIAN M	MILITARY ISSUES		
ARME	D FORCES		
Pe	eacekeeping Forces' Size, Cost Tabulated [ARGUMENTY I FAKTY No 14, Apr]	***************************************	. 1
POLIC	CY.		
Pa	artnership for Peace Seen as U.S. 'Trap' [PRAVDA 8 Apr]		. 1
STRAT	TEGIC DETERRENT FORCES		
Hi Su Co	istory of ABM Development Program [NOVOYE VREMYA No 11, Mar]b Designer Urges Reliance on SLBM's [ROSSIYSKAYA GAZETA 1 Apr]	11, 1993]	. 3
GROU	ND TROOPS		
Co	ommunications in Tank Battalion in Defensive (VOYENNYY VESTNIK No 12, Dec	:/	. 12
AIR, A	IR DEFENSE FORCES		
S-:	pportunities for Officer Education Advertised [KRASNAYA ZVEZDA 23 Mar] 300PMU Demonstrations at Kapustin Yar		
Im	[VESTNIK PROTIVOVOZDUSHNOY OBORONY No 12, Dec 1993]nprovements to MiG-29 [VESTNIK PROTIVOVOZDUSHNOY OBORONY No 12, Dec 1993]		
NAVAI	L FORCES		
	avy's Experience with Contract Recruitment [KRASNAYA ZVEZDA 19 Mar]inal Verdict on Komsomolets Remains Incomplete [KRASNAYA ZVEZDA 22 Mar]		
REAR	SERVICES, SUPPORT ISSUES		
Lt	t-Gen Solomatin: Housing Crisis Intensifying [KRASNAYA ZVEZDA 23 Mar]	************	. 24
STATE ANI	D LOCAL MILITARY FORCES		
INTER	RREGIONAL MILITARY ISSUES		
Ge	eneral Lebed on Dniester Conflict [KOMSOMOLSKAYA PRAVDA 6 Apr]	**************	. 27
UKRAI	INE		
M	Iorozov Attacks Trilateral Agreement [UKRAYINSKA HAZETA No 6, 17-30 Mar]adetskyy Comments on Officers' Groups [NARODNA ARMIYA 23 Mar]	***************	. 30
Str	rategic Arms Administrator on Path to Nuclear Disarmament [NARODNA ARMIY]	4 23 Febl	. 36
Sc	uclear Weapons Control Head on Disarmament Progress [NARODNA ARMIYA 23 Acientific Support to Armed Forces Needed [NARODNA ARMIYA 23 Mar]ole of Military at Industrial Enterprises [NARODNA ARMIYA 26 Mar]		. 38

### **BALTIC STATES**

Estonian Armed Forces Service Law Passed	[THE BALTIC OBSERVER No 11, 17-23 Mar]	41
--	--	----

# CAUCASIAN STATES

Defense Minister on War Casualties, Reserve Officer Training	
IRESPUBLIKA ARMENIYA 29 Marl	42

# **GENERAL ISSUES**

# ARMS TRADE

W. B. C. B. A. C. B. B. A. WOLLERSONER BALLY ALLE	
Weapons Deliveries Proposed To Clear Foreign Debt /KOMMERSANT-DAILY 24 Marl	13

# FOREIGN MILITARY AFFAIRS

Russo-Japanese Military Contacts Describe	[ROSSIYSKIYE VESTI 6 Apr]	4
---	---------------------------	---

### ARMED FORCES

Peacekeeping Forces' Size, Cost Tabulated 944K1050B Moscow ARGUMENTY I FAKTY in Russian No 14, Apr 94 p 2

[Unattributed report: "Blue Helmets' in Figures: Russian Peacekeeping Forces"]

[Text] In the capacity of Russian military observers of the UN there are in the Near East—14 persons (Egypt—6,

Israel—6, Syria—1, Lebanon—1), on the Iraq-Kuwait border—15, in the Western Sahara—30, in Cambodia—2, in the former Yugoslavia—22, Mozambique—19, and Rwanda—15. To finance peacekeeping operations on the territory of the former Union, the budget of the Ministry of Defense of the Russian Federation expended more than 2.5 billion rubles [R] (in 1992 prices), and in 1993—about R26 billion. The Ministry of Defense budget for 1994, like the entire federal budget, has not been approved yet.

Prepared with the assistance of the Directorate of Information and the Press of the Ministry of Defense of the Russian Federation.

Place of Deployment	Time of Deployment Number of Persons for 1994		Killed	Wounded
			from date of deployr	nent (to end of March)
Former Yugoslavia	April 1992	1,200 + 300 Will Arrive in April	2	15
Dniester Region	August 1992	1,800	16	25
South Ossetia	July 1992	523	2	1
Abkhazia	October 1992	About 1,000	6	15
Tajikistan	Collective Peacekeeping Forces Oct-Nov 1993	201st Motorized Rifle Division	53	77
North Ossetia and Ingush- etia		rces Fulfilled by Internal	28	60

### POLICY

## Partnership for Peace Seen as U.S. 'Trap'

PM0804145694 Moscow PRAVDA in Russian 8 Apr 94 p 3

[Article by Doctor of Historical Sciences Boris Poklad: "Partnership for the United States: Europe Is Being Pushed Into Military Integration Instead of Economic"]

[Text] Some exceptionally important events have occurred in international life recently, whose consequences will have long-term effects on the situation in Europe and the world and on the creation of a new world order. The decisions of the NATO Council at the highest level in Brussels in January this year clearly indicated the foreign policy course of today's sole superpower—the United States, its vision of the situation existing in the world as the 21st century approaches, and the place and role of the United States. Whereas the actions carried out by Washington in the international arena in the first year of B. Clinton's presidency could be viewed in the light of the fact that he was still settling in and sometimes acting from inertia, the "Partnership for Peace" program which he proposed in Brussels must be taken with the utmost seriousness. This program is not an improvisation, but a profoundly considered program that takes a long-term view. It is also important that it was adopted by the entire North Atlantic alliance.

To put it briefly, the United States intends to continue to pursue its own hegemonist aspirations and to continue the course of establishing a new world order to suit itself, based on bloc policy and reliance on military strength tactics. Under cover of the seductive slogan "Partnership for Peace" and adopting the pose of peacemaker, NATO openly set a course of "Drang nach Osten." And all subsequent events have graphically confirmed this.

The NATO Council decisions indicate that, in the context of the ending of military confrontation and the Cold War, that organization is not willing to disband itself and put an end to bloc policy. On the contrary, it is striving to step up its role and its military potential and broaden its range of members and sphere of activity. Even in the most difficult times of the Cold War, such feverish NATO activity was never seen.

No one can now say seriously that Europe will proceed, as expected, along the path of economic integration and cooperation, of unity. Instead, a course of military integration of Western and Eastern Europe under NATO auspices is proposed. An entirely new situation has arisen on the European continent, never seen in Europe's history—bloc structures have developed in international relations. NATO has already crushed the CSCE underfoot, and no one now remembers the common European home, except maybe M. Gorbachev. NATO is taking less and less notice of the United Nations, although in carrying out its cynical operations it is increasingly using that organization's flag as cover. In fact, the North Atlantic alliance is seeking to present itself in the role of something resembling a truly international organization.

However, whatever cloak NATO may don, it was and will remain a military-political alliance and the champion of the interests of a group of countries headed by the United States. Whatever anyone may say, throughout the ages military alliances were never formed just like that, for the fun of it. They have always had certain goals, and are

objectively directed against one or several other states. It goes without saying that if no such goals were set, the alliances would not be needed.

As the West German author Dietrich Schultze-Marmeling rightly stresses in his work "NATO: Anatomy of a Military Alliance," "the mission and purpose of military alliances is, by means of pooling the national military potential of the member states, to increase the deterrent power with regard to a common enemy and, through the division of labor, successfully to confront challenges that are beyond the potential of each individual state."

The question springs to mind: Who is the common enemy of the present member countries of the North Atlantic alliance and those states of Eastern Europe and the former USSR that have already signed Partnership for Peace agreements with the alliance and are seeking to become full members as soon as possible? Yugoslavia, maybe, which used to actively resist blocs? But that Yugoslavia is no more, thanks largely to the NATO leaders. Or Iraq, which survived the NATO operation code-named "Desert Storm" and the barbarous attack on its capital? Or little Cuba, which Russia has forsaken? Of course not! Following the elimination of the Warsaw Pact and the breakup of the USSR, their core remains—great Russia, which has always been a mighty barrier in the path of countries seeking world domination.

But times have changed. We are living in the age of nuclear missile weapons, and this must be taken into account by those who seek world domination, the recarving of territory, and the widening of their spheres of influence. They realize that today you cannot walk around with your guard down, and so they resort to new, more sophisticated forms and methods of the struggle to attain their goals, which quite recently produced an unprecedented effect. Without a single shot being fired, the elimination of the Warsaw Pact and the socialist community, the breakup of the Soviet Union, and the unification of Germany took place. This success inspired the United States and its NATO allies, who, while playing at partnership relations with Russia, are in fact pursuing a course aimed at draining its strength.

How can you be Russia's partner while at the same time interfering in its internal affairs, using various levers of influence, primarily economic levers? How can you be a partner and close your eyes to the flouting of the rights of the Russian-speaking population, especially in Latvia and Estonia, and gross provocations against Russian servicemen? In fact, NATO is giving them every possible support, and has concluded Partnership for Peace agreements with the Baltic countries. Is not that why the three fledglings who have only just left the big shared nest are permitting themselves to foul that nest and abuse it in every way?

The United States interprets partnership relations in a unique way: If Russia's position on a given issue fits in with Washington's policy, that is partnership; if not, a hue and cry is raised, and even a threat to use sanctions and stop granting economic aid. There are more than enough

illustrations to confirm this thesis, they are common knowledge. And the more we try to adhere to this—frankly—unequal partnership, the less account our partner takes of us.

In discussing partnership relations between Russia and the United States, we cannot disregard the statements of U.S. presidents, including B. Clinton, on the one hand, and of M. Gorbachev and B. Yeltsin on the other. They have all asserted that good, even friendly, personal relations have developed between them. However, for the peoples of the two countries it would have been far better if friendly relations had developed between Russia and the United States, while relations between their presidents were ordinary, businesslike relations. I.V. Stalin and F. Roosevelt did not go out of their way to express friendly feelings toward each other, but relations between the USSR and the United States were those of allies. Incidentally, the economic aid to the Soviet Union was also very real, a fact which people of the older generation remember with gratitude to this day. Despite the democratic transformations in Russia, all kinds of accusations are made against it: From occupying and annexing territory, to engaging in espionage. And this unseemly activity is engaged in by all kinds of forces, from the extreme right to the U.S. President. And while the vile remarks made by the former are nothing unusual, President B. Clinton's statement in connection with such a commonplace incident as the arrest of a spy is an unprecedented step. Evidently there were weighty reasons for this.

First, it was necessary somehow to overshadow and devalue B. Yeltsin's peace initiative on Bosnia, which did not fit in with the American policy of strong-arm military pressure but met with a wide international response and support, especially in the context of the NATO leadership's intensive preparations for aerial bombings of Serbian positions. This bold and constructive act, Russia's first in recent years, pushed the United States, so to speak, into the shadows. It revealed clearly to the entire world community Russia's enormous potential in the matter of keeping the peace.

Second, B. Clinton's statement was designed to provoke a new wave of anti-Russian sentiments and distrust in Russia's policy, and thus to strengthen the inclination of certain countries to cooperate with NATO.

An old acquaintance of mine from when I worked in Austria, the well-known French journalist Michel Tatu, even expressed the view that the new democracies in the East European countries, as well as the Baltic states and Ukraine, are "nearby foreign countries for the West too." And he is not far from the truth. For instance, the United States gives security guarantees to Ukraine, as if its neighbor state was not Russia, but the United States.

In addition, the United States gives security guarantees to Kazakhstan. What potential aggressor could attack Kazakhstan, for whose freedom and independence American soldiers are willing to die? You only have to look at the map, and it becomes clear: Russia or China.

Thus, if you look at the real facts rather than the verbiage, the United States and its allies are creating in Russia—although they do not say so outright—an enemy image. Hence the conclusion: In order to feel secure, we must unite. In these conditions, NATO is taking on a noble task by inviting European—and not only European—countries to participate in its Partnership for Peace program.

The elimination of the Warsaw Pact and the socialist community, the unification of Germany, the creation of new states as a result of the breakup of the Soviet Union and the dismemberment of Yugoslavia, and the signing by many of those states of Partnership for Peace agreements with NATO have led to major changes of a geopolitical nature and in the distribution of forces on the European continent. With the formation of the new countries. Russia is separated from Europe along its western border. Its coastal strip has also been reduced substantially, and consequently its access to the sea has deteriorated. In effect a cordon sanitaire has been created, while in accordance with the strategic plans of the NATO leaders Russia's neighbor countries are assigned the role of buffer states, or, for countries like Ukraine, the role of counterweight. And what this means for countries of this kind and the dire consequences it leads to, is well known from the history of international relations.

In the conditions that have arisen, the significance of nuclear weapons for Russia's security increases immeasurably. Through its policy the United States has itself made it impossible for the Russian parliament to ratify the START II Treaty, which envisages a significant weakening of our nuclear missile potential. Presumably nobody has any doubts about this any longer.

The deterioration in Russia's geopolitical and military-strategic situation is making peace and security in Russia more vulnerable and unstable. Russia was of old a decisive factor in the European equilibrium, the importance of which was defined thus by the well-known expert on Europe A. Debidour: "It is a system in which all the states restrain one another, so that none of them can impose its hegemony on others by force or subject them to its domination." The history of Europe has seen many such attempts, from Napoleon to Hitler. And much of the credit for the fact that many European countries managed to hold onto their independence belongs to Russia.

The situation that has arisen in Europe does not promote stability; it is fraught with the risk of serious consequences sooner or later. For sure, there will be some force in Europe that takes advantage of the existing situation to implement its cherished plans.

The question of Russia's intention to join the Partnership for Peace program has prompted many disputes and differing opinions. The problem has its history. At one time President B. Yeltsin declared Russia's desire to join NATO, although he received a polite refusal. Any other reaction to this spontaneous statement could hardly have been expected. Russia, a great power, could not and cannot be allowed into NATO as an equal member, since in that

case it would be on a par with the United States and would have the opportunity really to influence the policy of that organization, something that Washington will naturally not permit.

We must be clearly aware that as long as Russia remains a great power it will not be allowed into NATO as an equal member. It can only become that if it becomes a second-rank country, deprived of its nuclear weapons, or on condition that they are placed under direct NATO control.

Russia's participation in the NATO Partnership for Peace program would be a first, but major, step toward a radical change in the geopolitical and strategic situation in the world. Russia is not only a European, but also an Asian power. This would give NATO, and therefore the United States, the opportunity to gain a foothold in the Eurasian geostrategic region, which plays an exceptionally important part in the attainment of its cherished desires.

The establishment of partnership relations between Russia and NATO, which is so desired by Defense Minister P. Grachev, whose talent as a military strategist was revealed during the operation to shell and storm the White House in October last year, will lead to the minister's receiving instructions from the White House—not the one in Moscow, but the one in Washington. This will be a partnership not for peace, but for the United States, which seeks world hegemony. That is the role that is in store for Russia, with its very long border with unruly China, which rejects any U.S. diktat and pursues an independent domestic and foreign policy.

As a great power, Russia, which itself has never sought world domination, by entering into partnership relations with NATO, is falling into a trap cunningly laid by the United States. It will find itself implementing NATO's policy in one way or another, losing its free hand, its freedom to maneuver. It will unwittingly become an accomplice in the disruption of the balance of forces in the Eurasian geostrategic region. This will exacerbate its relations first and foremost with the countries of the Asian-Pacific region, especially such countries as China, India, and the DPRK, and will complicate its international situation.

By embarking on the path of cooperating with and strengthening NATO, Russia would be assuming a colossal responsibility for the pernicious consequences of such a step for the cause of peace and security in Europe and the world.

### STRATEGIC DETERRENT FORCES

### History of ABM Development Program

94WC0044A Moscow NOVOYE VREMYA in Russian No 11, Mar 94 (signed to press 15 Mar 94) pp 46-49

[Article by Oleg Golubev and Yuriy Kamenskiy: "Moscow's Missile Shield Without the 'Secret' Stamp"]

[Text] The creators of the first military antimissile defense system in the world discuss the history of its birth.

The authors of the article—Russian scientists and designers who have devoted more than 40 years of their life to the development and creation of military antimissile defense systems (ABM) and are continuing this work even today—discuss the first experimental complex of ABM equipment in the world and the first military ABM system in the world for the city of Moscow.

#### A Letter From Seven Marshals

By 1953 the USSR and the United States had created powerful nuclear systems and prepared them for testing, the first long-distance ballistic missiles (BM) had appeared, and intercontinental ballistic missiles had been prepared for testing.

A couple of months after Stalin's death, seven Marshals of the Soviet Union went to the CPSU Central Committee with a request to consider the question of creating ABM equipment. The question was quickly considered and this work was assigned to Design Bureau-1.

This design bureau handled the development of guided projectiles and systems for guiding them to the target. It is no accident that this was done at No. 1. It was under special observation by Lavrentii Beriya himself: The chief engineer of Design Bureau-1 was his son Sergey and the chiefs of the majority of departments were generals and colonels of the MGB [Ministry of State Security]. (One of these colonels was G.Ya. Kutepov, who was known even in the years before the war as the leader of a Special Technical Bureau under the NKVD [People's Commissariat of Internal Affairs], where a group of prisoners headed by A.N. Tupolev was working). Their former wards were also working in Design Bureau-1-the most capable inhabitants of the "prisoner-staffed research center" and "captured German specialists". Among this "special contingent" was, incidentally, a certain Karl Szilard, rumored to be the brother of Leo Szilard, who prompted Einstein to write Roosevelt a letter about the need to create an atom bomb in the United States.

In the initial stage of the activity of Design Bureau-1 the role of the "special contingent" was appreciable and accelerated the course of the scientific and technical developments. The basis of the collective of Design Bureau-1, of course, was made up of domestic specialists. In 1953 they successfully carried out a task assigned by Stalin personally three years before that: To create a practically impenetrable antimissile defense system for Moscow. The S-25 System developed by Design Bureau-1 was capable of repulsing three times the force of the Dresden raid by Anglo-American aircraft at the end of World War II.

After L. Beria left, large personnel changes took place in Design Bureau-1. S. Beria, of course, disappeared immediately, and they gradually removed the prisoners and Germans, who were set free. The leadership of Design Bureau-1 changed as well, and eminent scientists became the chiefs of the leading departments. It was at this time

that they received instructions from the CPSU Central Committee to develop work on the ABM in Design Bureau-1.

### System "A"

The task assigned to Design Bureau-1—to evaluate the possibilities of creating ABM equipment on the basis of modern radar technology and achievements in the area of surface-to-air guided missiles—was being carried out in several subdivisions simultaneously.

By the end of 1954 the work on the ABM was actually headed up by a 36-year-old doctor of sciences and specialist in electrodynamics, G.V. Kisunko, who had previously been in charge of the department for developing the aforementioned S-25 System. The chief designer of the S-25 System was Doctor of Sciences A.A. Raspletin, and two bears do not get along well in the same cave.

In 1955 a small subdivision headed by Kisunko was created to work on the ABM problem. The decisive experiments were organized and conducted in the shortest possible amount of time. It was necessary to locate the target, the missile warhead, and single it out against the background of the airframe at a distance of approximately 1,000 kilometers. Experimental locators were created and installed in places where the warheads landed—first in Kazakhstan and then—when the R-7, the first Soviet ICBM, appeared—on Kamchatka. It was necessary to find a way to destroy a warhead equipped with a nuclear system, and this extremely difficult problem was solved during the course of especially organized experiments.

In June of 1956 in Design Bureau-11 (now known as Arzamas-16) experiments were conducted on bombarding the warhead of the R-5 missile and its nuclear system with high-speed fragments. The experiments were conducted under the leadership of the scientific leader of Design Bureau-11, the father of the Soviet atom bomb, Yu.B. Khariton. He was satisfied that it was not so easy to hit the warheads with the fragments.

After discussing the problem of hitting the warheads in the scientific-technical council of the military-industrial commission (VPK) in which Yu.B. Khariton and S.A. Khristianovich participated, it was decided to test the impact of the shock wave of the nuclear explosion. And as early as December of that same year, 1956, at the Semipalatinsk test site, the corresponding experiment was conducted. The scientific leader was the most eminent explosion specialist in the Union, Academician M.A. Sadovskiy.

In July 1956 the military construction workers began to create a new test site for full-scale checks and lifelike tests of the experimental missile defense equipment that had been created. On the shore of Lake Balkhash, not far from the village of Sary-Shagan, they created the scientific center of the test facility and the command point for the experimental ABM complex—System A. The chief designer of the complex was G.V. Kisunko.

In order to increase the precision of the guidance of the antimissile missiles to the target, G.V. Kisunko suggested a method of determining the coordinates at three distances.

To do this, in the Betpak-Dal Desert in Kazakhstan they located on a space with a radius of 85 kilometers three radar sets for precise measurement of distances to the target and three radar sets that determined the distance to the antimissile missiles. The radar sets were created in Design Bureau-1 in conjunction with the Radio Technical Institute of Academician A.L. Minets. In order to guide the antimissile missiles on a collision course approaching the target they used a separate radar set located next to the starting position of the antimissile missile. The V-1000 antimissile missile was the brainchild of the design bureau academician P.D. Grushin, who was taken from Design Bureau-1 some time previously. It was equipped with the original fragmentation warhead. The system's electronic brain-one of the first Soviet computers-was created under the leadership of Academician S.A. Lebedev, Digital computer equipment was used for the first time in the Union in ABM weapons, beginning with the position finders and ending with the processing of the information obtained from the tests.

### We Hit a Fly in Space

The work at the test site continued on a strict schedule, day and night. In November 1960 the first antimissile missile aimed at a real target was actually launched, and on 4 March 1961, for the first time in the world, the warhead of an R-12 missile flying at a speed of more than 3 kilometers per second was struck.

The mission had been accomplished—it had been proved that it was possible to create an ABM system and that the interception and destruction of missile warheads could be achieved. After March 1961 the work at the test site continued. Flight tests were conducted (but without explosions) on the nuclear warhead of the V-1000 antimissile missile and also two types of proximity fuses for it—optic and electronic. A modification of antimissile missiles with heat seekers was also created and tested.

For a long time our achievements in the area of ABM did not receive recognition or the proper assessment. The date of 4 March 1961 was not long before 12 April 1961 when the first cosmonaut was put into space, overshadowing our ABM successes. It was not until the summer of 1961 that N. Khrushchev, speaking at an international forum, praised himself and us, saying that our scientists were so skilled they could hit a fly in space.

The successes in the creation of an experimental ABM system served as a basis for the decision to create a military ABM system for the city of Moscow, which was adopted in 1960. In the United States a similar decision with respect to the Safeguard System was not adopted until 1969.

### **Defending Moscow**

The decision to create an ABM system for Moscow was made even before the testing of System A entered its final stage. Decisions like this were made only by joint decrees of the CPSU Central Committee and the USSR Council of Ministers. It was important to us that the decrees regarding

ABM's (and there were quite a few of them) made it possible to work practically without any thought about the cost.

The tactical-technical requirements for the system were determined by the Ministry of Defense. This document, entitled "Planning Assignment," was issued to us in 1959. It determined that the A-35 System would have to provide for destroying six to eight ballistic missiles attacking Moscow at the same time. Here, without going into great detail, they indicated the proposed specifications of these targets which were unknown to us. All we knew was that these were American targets and it would be necessary to test the system at the site using domestic "analogues."

It was necessary to increase 20-fold the distance and altitude of the operation of the antimissile missiles. This was brought about, in the first place, by the need to cover the maximum defended area with a minimum number of antimissile missiles. In the second place, it was necessary to raise the minimum altitude for destruction of the warheads to an altitude at which a preventive or counter (at the time of destruction) nuclear explosion would be safe for the defended territory. In the third place, the basic means of destroying enemy missiles in the military system were nuclear warheads with fairly large capacities, which it would also be better to explode at a distance from Moscow. This required a different, gas dynamic principle for control of the antimissile missile since a large part of its trajectory passed practically through a vacuum. Such a missile was developed in the special design bureau of academician P.D. Grushin and was called the A-350 (in the West-Galoshe). The use of nuclear systems in antimissile missiles was not principally new, but their use was planned only in especially dangerous situations. This was precisely the kind of situation an attack on the country's capital would be.

#### Operation K

The development of the nuclear warhead for the antimissile missile A-350 took place in the Urals in an organization now known as Chelyabinsk-70. The Ural physicists hoped to destroy enemy nuclear missiles at high altitudes (where there is no air shock wave) through the action of neutrons ("neutrons are the best fragments," as one of the leaders of the military-industrial complex said). But soon at a seminar held in the office of Nobel prizewinner, Academician N.N. Semenov, we found out that even greater radii for destroying warheads could be achieved through the mechanical action of x-ray radiation of the nuclear explosion of the antimissile missile on the body of the warhead. At the beginning of the 1960's, right before the signing of the 1963 agreement on banning nuclear testing in the space surrounding the earth, a series of nuclear explosions was conducted (Operation K) which made it possible to obtain very important materials concerning their impact on ballistic missiles, the environment, and the ABM weapons that had already been created at the Sary-Shagan test site.

The defense of the draft plan for the A-35 System took place in the autumn of 1962. The chairman of the commission was the troop commander of the Moscow air

defense district, General P.F. Batitskiy—a huge man with a thundering voice. The commission's final meeting occurred amidst stormy discussions and lasted for a very long time. The general was bored by this; he got up and went over to the system's chief designer G.V. Kisunko.

"Well, Grigoriy Vasilyevich, you will not deceive us everything will be the way you say it will?"

"Of course, Pavel Fedorovich, I swear to you!"

"Well, all right, I believe you...and all of you (and here he turned toward the hall) be quiet!"

And with these words he embraced Kisunko and kissed him.

Neither he nor Kisunko, of course, suspected that very soon our project would undergo large changes and another 15 years would pass before the system would go online.

Quite unexpectedly, the initial cause of the future changes in the plan was the color film on System A shown to Khrushchev himself at the beginning of 1963. After seeing the film, he went up to Kisunko and said approximately the following: "I congratulate you, you have created the first ABM system in the world and the film shows it very well.... But, you know, it seems to me that your system is too complicated—remember the episode where many many waves are multiplied in order to down a single target. And if there are many of them?... Can you not think of something simpler?..." It is not known whether Khrushchev himself thought of this or somebody suggested it to him, but Kisunko and all of us had to think about this.

Of course, even before that we understood the shortcomings of the "triangulation," whereby it was necessary to have six radar sets to guide one antimissile missile to the target. But Khrushchev's remark was perceived by everyone, including the military, as an order to be executed immediately. It was necessary to reject "triangulation" which, of course, increased the system's reliability, but the precision of the guidance of the missiles was significantly reduced. Kisunko overcame this shortcoming by agreeing with the leadership of the Ministry of Medium Machine Building to increase the capacity of the nuclear charge of the antimissile missile.

But those same experiments led to the need for more changes in the means and organization of interception in the A-35 System since it revealed a number of consequences of the nuclear explosion of the antimissile missile that were harmful to the operation of the system.

### Academician Chelomey's Clout

Although these difficulties were serious, they were internal, and we overcame them within through cooperation of the developers. A more serious crisis in our activity occurred approximately at the same time in 1963, when academician V.N. Chelomey, who at that time began to occupy a special position in Soviet missile technology, turned his attention to the problem of the ABM. This was explained also by the fact that Khrushchev's son, Sergey, was working in Chelomey's design bureau. Chelomey took advantage of this to relegate to the background the

products of the older missile firms of Korolev and Yangel. Having won this battle easily, he decided to go further and suggested using his UR-100 ballistic missiles to create the ABM system which he called Taran. Without going into the technical essence of this proposal, which was unsubstantiated, as we understood at the time, let us note that the Soviet leadership liked it because it seemed to them that by increasing our missile capabilities we would be killing two birds with one stone; that is, we could provide for not only attack but also protection from missiles.

Chelomey's appearance in the ABM area along with his "clout," and it was a clout in the form of Khrushchev, brought to the ABM problem the most active attention from high party, government, and military leaders, and also led to the appearance of other innovative proposals regarding the ABM. In the Pokrovskove boarding house near Moscow, (Gertsen's former estate), a conference was convened which was supposed to decide what to do. As is frequently the case, the conference decided nothing, but the absence of a unified opinion among the participants in the conference did not keep the country's leaders from giving the "green light" to Chelomey's proposal. The work on our A-35 System was halted and we were assigned the role of volunteer but unnecessary assistants to Chelomey. The latter behaved condescendingly (behind his back Kisunko called him Khan Chelomey and even Bogeyman, and fairly frequently Kisunko himself had to appear at his headquarters) and his power in the missile industry increased niore and more.

But suddenly everything changed—there was the October plenum of the CPSU Central Committee (1964) at which Khrushchev was forced to "abdicate the throne" and Kisunko again became the chief designer of the ABM and soon was awarded the title general designer of the ABM.<sup>2</sup>

### "Cabin"-"Dog House"

But our position became worse after we failed to keep our promise "to the party and the government" (and Kisunko's personal promise to D.F. Ustinov, at that time secretary of the CPSU Central Committee) to release the A-35 System for the 50th anniversary of the Great October Socialist Revolution.

Kisunko's personal situation got much worse, which was definitely taken advantage of by influential people whose judgments he had frequently ignored, placing his hopes in protection from higher up. At the beginning of the 1970's, G.V. Kisunko was removed from the leadership for releasing the A-35 System. This assignment was given to his first deputy, I.D. Omelchenko.

The A-35 System was created around Moscow. The main command computer center was located in Kubinka, 70 km from Moscow. Its building was adjacent to the immense antenna for the long-distance observation system that was a part of the A-35 System. We called this antenna "Cabin," and in the West it was called "Dog House." The system's firing complex was located at a distance of about 85 km from the center of Moscow and included guidance radar and the starting positions for the antimissile missiles. All these facilities or, rather, their computers were linked by

circular and radial communications lines. This provided for coordinated automated operation and exchange of information among the 29 computers included in the system. Such a complex communications system was set up back in the time of "triangulation," but it was also necessary to control the system under the complex conditions of numerous nuclear explosions of antimissile missiles. This task was new for the air defense and ABM systems and it was given a very large amount of attention but, unfortunately, not after the beginning of the planning of the system and its weapons. Therefore, the system was put into operation in stages, and this process, including modernization of the system, lasted up until the end of the 1970's. This contributed to rushing the work on the ABM and the agreement on limitation of ABM systems signed by the USSR and the United States in 1972. The work in Kubinka speeded up after 1976, when for the first time a nonmilitary person was appointed minister of defense-D.F. Ustinov. When he came it seemed that the endless process of acceptance by the military of the A-35 System was placed within a strict framework and ended on the eve of the 60th anniversary of the October Revolution, 10 years later than Kisunko had promised it to Ustinov.

Therefore, G.V. Kisunko was not present in Georgiyevskiy Hall of the great Kremlin palace where in the autumn of 1979 Brezhnev's deputy, V.V. Kuznetsov, conferred state awards on the developers of the A-35 System.

#### **Footnotes**

- 1. One must say that in those days nepotism was very widespread—as, incidentally, it has always been in all countries. Thus, the sons of Ustinov and Suslov and the daughter of the chairman of the military-industrial complex, Smirnov, were working in Kisunko's firm. Although this did not help us in our battle with Chelomey, it showed the position of ABM in the awareness of the party-government elite.
- 2. Soon the subject of the ABM became so popular that Voyenizdat published a novel by N. Gribachev about this subject, "Battle." Its main hero was Umnov (Kisunko)—the creator of the Mercury ABM system. He had to engage in battle with "bad generals," who were supporting an alternative, bad ABM system "Shield" ("Battering Ram").)

### Sub Designer Urges Reliance on SLBM's

94WC0048A Moscow ROSSIYSKAYA GAZETA in Russian 1 Apr 94 p 2

[Report on interview with Academician Sergey Nikitich Kovalev, general designer of nuclear submarine missile carriers, by Sergey Ptichkin; place and date not given: "The Storm of Reforms Is Stronger Than the 'Typhoon"]

[Text] I went to see Academician Sergey Nikitich Kovalev, general designer of nuclear submarine missile carriers, with one purpose in mind: To ask him to discuss the history of the creation the sea-based strategic system Typhoon, which is the pinnacle of shipbuilding thought of the 20th century.

But the interview did not work out. Sergey Nikitich delivered a passionate monologue on what, in his opinion, had made Russia a great power and what guarantees its greatness in today's world.

Russia is about to celebrate the 300th anniversary of its Navy—Kovalev smiled sadly. An organizing committee was even created to prepare for the celebration. But what will we celebrate?

When Peter the Great was building ships, the entire country was watching. Every indentured serf knew that when the tsar introduced new taxes he would put the people's money mainly into the construction of a fleet for the powerful country. As they would say nowadays, Peter I was implementing a nationwide program at that time. Since that time, serving in the Russian Navy has been tantamount to serving the Homeland...

When the Americans began to launch the first nuclear submarines, the entire country was watching this great experiment. Everyone understood that a program that was costly but vitally necessary to the United States was being implemented.

Our nuclear fleet was built under the cover of strict secrecy and nobody knew the difficulties that were surmounted by our scientists, engineers, and workers in order to preserve for Russia the status of a great naval power.

When the United States began to carry out the great strategic project Trident, the whole world was watching this.

And few people knew that at that same time—a year later, actually—the USSR had begun to create an analogous strategic system, the Typhoon. Without any grandstanding we solved the most difficult problems, and with much less cost than the Americans did. We were able to have our own sea-based strategic weapons system, which is equal to the Trident, in place at practically the same time as they did theirs.

It was having the Typhoon in place that put an end to the nuclear missile arms race between the USSR and the United States, although for some reason people have always remained silent about this and spoken only about mobile land-based missiles, which were supposed to have created the parity we all know about. No! Only the sea-based strategic forces that appeared in the USSR in response to the American challenge showed that there was no point in further increasing nuclear weapons.

And now I have to talk about something I do not want to mention since it is stupid to put questions of the development of Russia's strategic forces up to public plebiscites; they should be decided in the corresponding staffs by specialists who are professionally trained for this. But the situation is developing in such a way that today even we people who are not used to public speeches have to appeal directly to the citizens of Russia through the media for moral support.

What kind of country will we have to greet the 21st century: Either the great world power which it still is to this

day, in spite of all the disorder, or indeed a likeness of "Upper Volta with missiles"?... This is by no means about another round of the arms race. On the contrary, it is about more efficient expenditure of the scanty state funds, about the possibility of preserving Russia's national independence in reality and not on paper.

The fact is that today it has become especially crucial to decide the future of Russia's strategic nuclear forces and which to give priority to.

At the present time we are just developing the concept of strategic weapons, which should be fully in keeping with the defense doctrine we adopt. And it does not seem quite right to me to publish articles of an openly promotional nature like the one in IZVESTIYA of 9 February under the heading "Topols Will Defend Russia" or openly defamatory ones like the one in MOSKOVSKIY KOMSOMOLETS for 26 March.

Incidentally, today it has become acceptable to write only bad things about the fleet, so it is probably not worthwhile to respond to every "critical" article which is especially written in street language. The article that appeared in IZVESTIYA is a different matter, since the declarative heading itself seems to proclaim unambiguously: The decision has been made, only Topol land-based mobile missile complexes can defend Russia.

In a brief newspaper article it is impossible, of course, to go into a detailed comparative description of various kinds of strategic weapons, but precisely as a result of a detailed comparison it would be possible to prove convincingly that it is by no means land-based missiles but only strategic sea-based forces, which are fully in keeping with the defense doctrine, that are capable of defending Russia from any attack.

The fact is that only sea-based missile complexes have an immense advantage over land-based in terms of their ability to be retargeted to any object. There are many tactical devices to guarantee the concealment of submarine missile carriers, as distinct from land-based missiles, which are constant targets. Moreover the probability of destroying missiles launched from fixed starting positions (silo or "mobile") is considerably greater than those that start from under water. And, finally, a responsive missile volley even from just one submarine that has survived is much more effective than a volley from dozens of Topols which by some miracle have survived after the first aggressive enemy attack.

But, I repeat, all these are specialized issues which the public must accept on faith or else not believe at all. We love to refer to the American experience. So let us look at what the Americans are doing today in the area of their own nuclear missile forces.

The United States made a decision to completely do away with land-based complexes, giving all priority to sea-based forces alone. The fact is that the Americans quite reasonably saw that in the future land-based complexes could not be used as counterattack missiles; they are good only for those who have aggressive intentions.

After investing a good deal of effort and money in the creation of the most complicated MX mobile missile system, the United States today is abandoning this complex as well. The Pentagon has recognized that even on the excellent American roads it is quite dangerous to transport nuclear missiles, which are exposed to everything, be it military aggression or a terrorist act.

Today land-based nuclear missile complexes present a greater threat to the territory on which they are located and which they are intended to defend than they do to a hypothetical enemy. So by refraining from further development of strategic missiles on their territory, the Americans are actually showing concern for the safety of the United States and their compatriots. Perhaps our common sense should not be so different from that of the Americans. We must simply understand that land-based strategic missiles with any base have fulfilled their historic role and in the future should be mothballed altogether.

The only effective means of restraining and preventing aggression both for the Americans and for us are sea-based strategic weapons systems.

### **OUR NOTE**

For many years Sergey Nikitich Kovalev was one of the most concealed designers of our Homeland's defense complex. And he probably did more to establish the USSR nuclear submarine fleet than was done in the United States by Admiral David Rickover, who was practically a national hero across the ocean. Well, we sometimes do not know our own defense industry heroes as well as we do foreign ones. But they are the ones, these hidden academicians, who created the potential of hidden power that makes it possible for Russia's leaders to feel that they are leaders of a great power.

# Composition, Deployment of Strategic Missile Troops

94UM0319A Moscow VOYENNYYE ZNANIYA in Russian No 11, 1993 (Signed to press 15 Oct 93) pp 4-6

[Article by Lieutenant Colonel I. Safronov, under the rubric: "19 November Is Missile Troops and Artillery Day": "Both Shield and Sword"]

[Text] The Strategic Missile Troops... Until quite recently everything that was associated with them was under a cloak of impenetrable secrecy. How many of them, what kind of capabilities, and where they are deployed... you could only guess about that.

But perhaps our former "adversary" had nevertheless learned about all of that before we did and therefore we obviously were permitted to touch this secret.

On 17 December, 1959, the Soviet Government decided to create a new service of the Armed Forces—the Strategic Missile Troops (RVSN), that have been standing guard over the Fatherland's peace and security for nearly 35 years now. During that time, several generations of combat missile systems have been replaced. Today, fourth generation intercontinental ballistic missiles (ICBM's) are in the

RVSN inventory. Their main qualities are enhanced survivability, high combat readiness, and the capability to penetrate an enemy antiballistic missile (ABM) defense system and accurately destroy highly-hardened targets at any distance.

The RVSN occupies a leading role in the structure of the strategic nuclear forces: It has nearly two thirds of all weapons launch vehicles and nuclear warheads and three fourths of the total megatonnage of these forces. They are currently deployed on the territories of four states: Russia, Belarus, Kazakhstan and Ukraine. Right now there are a total of seven types of ICBM's in the RVSN inventory (See Table No. 1). Five types (the RS-10, RS-12, RS-16, RS-18 and RS-20) are located in silo launchers. RS-22 missiles are dual-based missiles and are located on mobile rail launchers as well as in silos. A dual-based capability was also provided for during the development of the RS-12M missile; however, only the "Topol" Mobile Ground-Based Missile System that is equipped with these missiles was accepted into the inventory.

According to the terms of the Strategic Arms Reduction Treaty (START II) that was signed by the presidents of Russia and the United States at Sochi on 3 January 1993, the RS-12M ICBM will become the base (primary) ICBM in the RVSN and therefore will also be located in the silos of RS-20 heavy ICBM's that have been removed from the inventory.

RS-10, RS-12 and RS-12M Lissiles have been equipped with single warheads and the remaining missiles—with multiple independently-targetable reentry vehicles (MiRV's). The RS-16 has four, the RS-18 has six, and the RS-20 and RS-22 have ten MIRV's each. We must especially point out that there are no series-production ICBM systems in world missile construction that are similar to the fixed combat systems with the RS-20 heavy missiles that have received the designation "Satan" from the Americans and also the ground-based and rail-based combat missile systems ("Topol" with the RS-12M ICBM).

At the present time, there are approximately 900 ICBM's with more than 3,800 nuclear warheads in RVSN units that are deployed on Russian territory.

Incidentally, the missile troops are the cheapest service of the Russian Armed Forces. They are capable of carrying out 60-100 percent of strategic combat missions and they require for themselves only six percent of the entire Russian defense budget. At that, seven percent of that is for maintenance of personnel, nine percent for capital construction, and four percent for scientific-research work.

Table 1. Combat Composition of the Strategic Missile Troops Type Type Type Initi-Numbe War-Num-Total Flight Numbe Mis-Max-Launch Remarks ation of head ber of War-Range. 1,000's Weight sile imum Weight **ICBM** Basing Yield. ICBM's Fuel of Warheads tonnes Stages Length Diatonnes Deploy Withbeads kilometer ment tons kiloout of the Warmeters Missile head. Airframe, m RS-1973 50.1 silo 1 1,100 liquid subject to 326 326 13.0 1.2 2 17.0 2.0 elimination by 10 (SSthe year 2003 according to the START II Treaty RSsilo 1969 750 40 40 9.4 0.6 3 19.7 1.84 51.1 solid subject to 12 elimination by (SSthe year 2003 13) according to the START II Treaty RS-1979 71.1 subject to silo 4 750 188 10.0 2.55 20.9 2.25 liquid elimination by 16 (SSthe year 2003 according to 17) the START II Treaty RS-1979 211.1 silo 10 550 308 3,080 11.0 2 liquid subject to 8.8 29 1 30 20 elimination by (SSthe year 2003 18) according to the START II Treaty

Type of ICBM	Type of Baning	Initi- ation of Deploy- ment	Number of War- heads	War- bead Yield, kilo- tons	Num- ber of ICBM's	Total War- heads	Flight Range, 1,000's of kilo- meters	Throw Weight, tonnea	Number of Stages	Mis- site Length With- out War- head, m	Max- imum Din- meter of the Mis- sile Air- frame, m	Launch Weight, tonnes	Type of Fuol	Remarks
RS- 18 (SS- 19)	silo	1979	6	550	300	1,800	10.0	4.35	2	21.1	2.5	105.6	liquid	subject to elimination by the year 2003 according to the START II Treaty
RS- 22 (SS- 24)	silo	1987	10	550	56	560	10.0	4.03	3	18.8	2.4	104.5	solid	subject to elimination by the year 2003 according to the START II Treaty
RS- 22 (SS- 24)	rail	1987	10	550	33	330	10.0	4.05	3	19.0	2.4	104.5	solid	subject to elimination by the year 2003 according to the START II Treaty
RS- 12M (\$S- 25)	motor vehicle	1985	1	550	288	288	10.5	1.9	3	18.5	1.8	45.1	solid	subject to elimination by the year 2003 according to the START II Treaty

Remarks: The American designation is given in parentheses.

Right now, practical measures of the military reform that is being conducted in the Russian Armed Forces are being carried out in the RVSN. It is being conducted in three stages. In the first stage (by the end of 1993), the prospects for development of the RVSN have been precisely ascertained and work has begun to remove missile systems (RS-10, RS-12, and RS-16) with expired warranty operating periods from the inventory. According to the terms of the START Treaty, they plan to disband or redeploy a number of units on Russian territory in the second stage (in 1994-1995). At that same time, work will begin to reequip fixed missile systems with single-warhead missiles. During the third stage (after 1995), the directions of the future development of the RVSN will be precisely determined while taking into account the specific political, military and economic realities at that time.

At the present time, the RVSN High Command is successfully carrying out the mission of performing combat alert duty which is the highest form of maintenance of troop c. s. bat readiness. And this is being done under the difficult conditions of implementing the START Treaty, the initiation of the elimination of nuclear weapons in Ukraine, the withdrawal of nuclear weapons from Belarus and also the disruption of industrial cooperation among the CIS states. So, in accordance with the START II Treaty, all ground-based ICBM's with MIRV's, including the heavy RS-20's, will be eliminated in Russia by the year

2003. Right now they are 30% of the total number in our country. Missiles that were developed and produced during the earliest periods—the RS-10, RS-12 and RS-16—will primarily be destroyed.

In order to prevent the impression from being formed about Russia's unilateral disarmament, we must stress that all American ICBM's with MIRV's will be eliminated or reequipped. They are the 50 most powerful and accurate American MX (Peacekeeper) missiles with 500 nuclear warheads. The number of warheads will be reduced from 1,500 to 500, that is, from three to one per missile, on 500 Minuteman III ICBM's. And we will be able to utilize 90 of our RS-20 missile silos for RS-12M single-warhead ICBM's. To do that, they will pour concrete in the silos to a depth of five meters so that heavy missiles cannot be accommodated in them. The remaining 64 silos will be eliminated.

Furthermore, we can transform the warheads of certain missiles, having also transformed their into single-warhead launch vehicles, and we can eliminate excess missiles, not by exploding them, but by launching a commercial or scientific payload into space which was successfully demonstrated by the launch of a "Start" missile, developed based on the RS-12M, from the Russian Plesetsk Missile-Space Test Range on 25 March 1993 (Read about that in more detail in a future issue of this magazine). In general,

nearly all domestically-produced missile launch vehicles that launch space devices and craft into space were developed based upon military iCBM's (the R-7A—the "Soyuz" Missile Launch Vehicle, the R-12—the "Kosmos" Missile Launch Vehicle, and the R-36—the "Tsiklon" Missile Launch Vehicle).

In the process of implementing the START Treaty, we need to eliminate a large number of warheads and corrosive components of missile fuel for which significant material resources will be required, including to support ecological safety measures and other measures associated with the elimination of nuclear weapons.

Implementation of the concluded START treaties depends not only on Russia and the United States, but also on Belarus. Kazakhstan and Ukraine, which have also assumed responsibilities for the elimination of nuclear weapons. A package of normative-legal acts has been signed with the Republic of Belarus that determine the procedures and time periods for withdrawing the "Topol" missile system division that is equipped with RS-12M missiles and which is deployed on Belarusian territory. In 1994, it will be redeployed to Valday near Vypolzovo under the jurisdiction of the Rezhitskiy Red Banner Guards Missile Division. The missile systems, equipped with RS-16 ICBM's, that have been in the inventory of this division since 1979 will be removed from the inventory in the next two years.

Table 2. Strategic Missile Troops Combat Missile System Deployment Areas

Deployment Loca-	ICBM	Number	Remarks
tion	Designa- tion	· value	A CHILLIA
i. On the Territory of	Russia		
Aleysk (Altay Kray)	R5-20	30	
Bershet (Perm Obiast)	RS-10	60	
	RS-22 (rail)	9	
Vypolzovo (Tver Oblast)	RS-16	47	Will be removed from the inven- tory by 1994
Dombarovskiy 'Orenburg Oblast)	RS-20	64	
Drovyanaya (Chita Oblast)	RS-10	50	
Irkutsk	RS-12M	36	
Yoshkar-Ola (Republic of Mariy-El)	RS-12	40	
	RS-12M	18	
Kansk (Krasnoy- arsk Kray)	RS-12M	27	
Kartaly (Chelyab- insk Oblast)	RS-20	46	

Kozelsk (Kaluga Oblast)	RS-18	60	
Kostroma	RS-22 (rail)	12	
Krasnoyarsk	RS-10	40	
	RS-22 (rail)	12	
Nizhniy Tagil (Yekaterinburg Oblast)	RS-12M	45	
Novosibirsk	RS-12M	27	
Svobodnyy (Amur Oblast)	RS-10	60	
Tatishchevo (Saratov Oblast)	RS-18	110	
	RS-22 (silo)	10	
Teykovo (Ivanovo Oblast)	RS-10	26	
	RS-12M	36	
Uzhur (Krasnoy- arsk Kray)	RS-20	64	
Yurya (Kirov Oblast)	RS-12M	45	
II. On the Territory	f Belarus		
Lida (Grodno Oblast)	RS-12M	27	The missile divi- sion (54 RS-12M) will be redeployed to the Vypolzovo area (Tver Oblast) by 1994
Mozyr (Gomel Oblast)	RS-12M	27	The missile divi- sion (54 RS-12M) will be redeployed to the Vypolzovo area (Tver Oblast) by 1994
III. On the Territory	of Kazakhstan		
Derzhavinsk (Akmolinskiy Oblast)	RS-20	40	
Zhangiztobe (Semipalatinsk Oblast)	RS-20	52	
IV. On the Territory	of Ukraine		
Pervomaysk (Nikolayevskiy Oblast)	RS-18	40	The first missile regiment (10 RS- 18's) was removed from alert duty on July 15, 1993
	RS-22 (silo)	46	
Khmelnitskiy	RS-18	90	

A package of documents that regulate the activities of RVSN formations on Kazakh territory has also been signed with the Republic of Kazakhstan, however, the normative-legal status of the strategic nuclear forces has not been defined. This factor does not permit us to begin implementing the START Treaty.

A fundamental divergence of the positions of Russia and Ukraine consists of determining the status of the strategic nuclear forces on the territory of Ukraine and their state affiliation. At the same time, the removal from combat alert duty of the first of five missile regiments began there on 15 July 1993. This missile regiment is located in the area of Pervomaysk in Nikolayevskiy Oblast and 10 RS-18 missiles were on combat alert. Now the nuclear warheads are being removed from the missiles (for the time being they will remain in Ukraine until the final resolution of the fate of nuclear weapons in Ukraine), the flight task will be removed, the fuel components will be poured out (there is approximately 90 tonnes of fuel), and then the "item" will be removed from the silo and sent to an elimination facility in the village of Pibanshur (Udmurtiya).

Under conditions of the disintegration of the CIS' states military-industrial complex, the organization of Russian industrial cooperation for the development of a single-warhead missile is becoming a multifaceted problem. Russia has remained the primary base state for the production of arms and military equipment, but a search for ways for an integrated approach to the development of missile weapons with compliance with treaty obligations is most advisable at this stage. It is advisable to conclude international agreements that define the procedures for the functioning of the CIS states' industrial enterprises to resolve this problem.

Missile weapons are collective and complex weapons. Therefore, the RVSN must be manned from rank and file to general with highly skilled cadres who have high moral-psychological, physical and professional qualities. There are definite problems in the issues of manning the RVSN with servicemen on a voluntary basis—on contract. Here, complications can arise since the majority of RVSN facilities are located in remote areas, far from large cities. The shift to manning on contract will certainly require significant material expenditures. As a result of the increase of the number of professionals, problems are increasing in providing them with housing and in job placement for family members, etc. The planned reduction of terms of service must entail a change of the training system for soldiers and sergeants.

But we need to say that the professional training of missileers is at the proper level. This has been confirmed by the results of missile launches during the course of implementing the INF Treaty (1988). In accordance with it, 72 RSD-10 missiles were destroyed through launching. The launches were monitored by American inspection teams. All launches without exception were conducted successfully. The personnel who prepared and conducted the work on this program demonstrated the highest level of professionalism and responsibility.

COPYRIGHT: Izdatelstvo TsS SOSTO SNG "Patriot", "Voyennyye znaniya", 1993

### **GROUND TROOPS**

### Communications in Tank Battalion in Defensive 94UM0340A Moscow VOYENNYY VESTNIK in Russian No 12. Dec 1993 pp 48-50

[Article by Colonel Yu. Tsyuprik, candidate of military sciences, Military Academy of Armored Troops]

[Text] The tank battalion is the basic combined arms tactical subunit. Tanks have high firepower, armor protection, great striking power, mobility, maneuverability and rather low vulnerability to enemy fire. Consequently, if the battalion will be operating in the defense (as part of a motorized rifle brigade, for example), then evidently it is advisable to employ it in the second echelon or in the reserve to execute counterattacks and rout an enemy who has penetrated. In addition, it may be assigned to the first echelon or be attached to motorized riflemen to increase defense stability and activeness.

This means the organization of communications in the battalion should be such that the commander and his staff are provided not only with stable, reliable command and control of tank companies and platoons and even of tanks [lineynyye tanki], but also coordination with motorized rifle subunits.

Accomplishing these and other tasks requires competent communications planning, which definitely should be confirmed by calculations and should take account of previous experience. This is a very serious question demanding separate consideration, so here we will examine variants of organizing radio and wire communications.

Signal platoon personnel and equipment are used in the battalion to support command and control of subordinate rubunits. In addition, the use of mobile and signalling assets to deliver combat documents and transmit commands and signals is possible.

### **Radio Communications**

It should be noted that in a tank battalion radio equipment is the most important and often the sole means of supporting command and control of tank subunits. All commands are transmitted over radio in plain text at the battalion-company-platoon-tank level; callsigns are used only for persons in authority.

Both signal platoon equipment as well as tank radios must be used to organize radio communications in the battalion. It is advisable to plan it in such a way that a transition from one kind of battle to another requires no substantial changes in the communications layout diagram. Fig. 1 shows one such variant using R-130 and R-123 radios.

The tank battation commander can control subordinate subunits from the commander's tank or from a command and staff vehicle. Radio communications will be provided as follows:

- with the brigade commander and staff over three radio nets using HF and VHF [UKV] radios;
- with the chief of staff, deputy for weapons, and commanders of companies, platoons and tanks over one radio net using VHF radios.

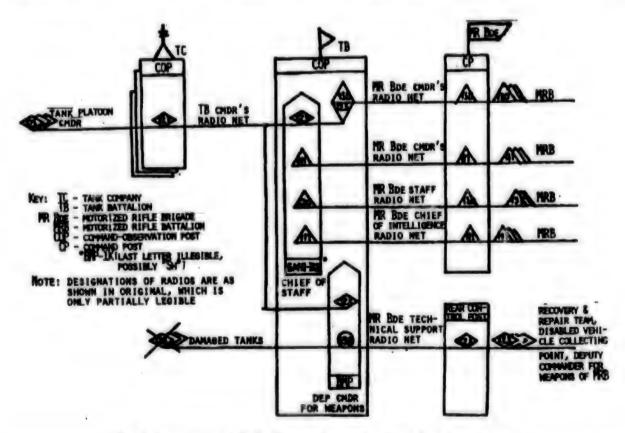


Fig. 1. Organization of Radio Communications in a Tank Battalion (Variant)

A feature of this method will be that a radio net consists of a large number of subscribers, which of course will create certain difficulties in controlling tanks on the battlefield. Observance of communications discipline by all tank commanders will be of priority importance here. The battalion commander and chief of staff and the company commanders have the right to transmit. Other subscribers have the right to transmit only on being called up by the net control station.

It would appear that in order to receive intelligence, one VHF radio in the command and staff vehicle of the tank battalion chief of staff should be in the radio net of the motorized rifle brigade chief of intelligence.

As in the motorized rifle battalion, special radio nets cannot be set up in the tank battalion to support coordination—there are not enough radios. Therefore it is advisable to have elements of the battle formation exchange information by mutual entry into appropriate radio nets.

Warning signals are transmitted as top priority over all means of communications and are immediately communicated to personnel.

As a rule, it is advisable to provide for radio communications of battalion technical support over a similar radio net of the motorized rifle brigade. There must be provisions to include in this net the portable R-159 not only of the tank battalion deputy commander for weapons, but also of all disabled tanks. The fact is that the recovery and repair team chief, disabled vehicle collecting point chief and other persons in authority responsible for restoring combat vehicles will be operating here.

Further, when companies are assigned from the tank battalion to reinforce motorized rifle subunits, it is necessary to provide for independent radio nets of tank company commanders for command and control of tank platoons and tanks. The tank battalion commander can enter each of these radio nets periodically to get the necessary information.

Radio communications will be organized as shown in Fig. 2 if the tank battalion is supplied with R-134 and R-173 radios. In this case the advantages will be as follows. First of all, a VHF radio can operate with the R-173P receiver. For example, this allows a tank battalion commander to use headphones to monitor the work of two subscribers: the motorized rifle brigade commander and commander of 1st Company. Secondly, the R-173 has more pretuned frequencies than the R-123 and it takes less time to switch from one frequency to another.

Thirdly, installing an R-174P receiver in each tank permits making the tank battalion commander's radio net smaller

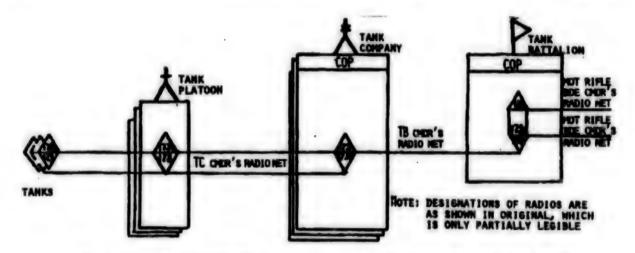


Fig. 2. Features of Organizing Radio Communications in a Tank Battalion Using R-173 Radios

(which is of no small importance today) and creating radio nets in tank companies, and if necessary also in platoons. As a result, the number of subscribers can be reduced to 5-6 for the tank battalion commander! Moreover, subunit commanders gain an opportunity to control tanks on their own for the first time!

Calculations show that the proposed variants of radio communications will permit transmitting and receiving the necessary information flow on the link between the battalion command-observation post and motorized rifle brigade command post in defensive battle and providing more reliable command and control of subordinate companies and platoons. It should be taken into account that

the enemy may detect the operation of radio equipment. Consequently one must provide for those measures which will hinder enemy SIGINT collection.

#### Land-line Communications

Exercise experience at the tactical command and control level shows that in defensive battle it is difficult to get by in a tank battalion without wire communications lines. Therefore these lines may be used both independently (see Fig. 3) as well as together with radio equipment.

As a rule, it is best to organize land-line communications with the motorized rifle brigade commander and staff using brigade personnel and assets.

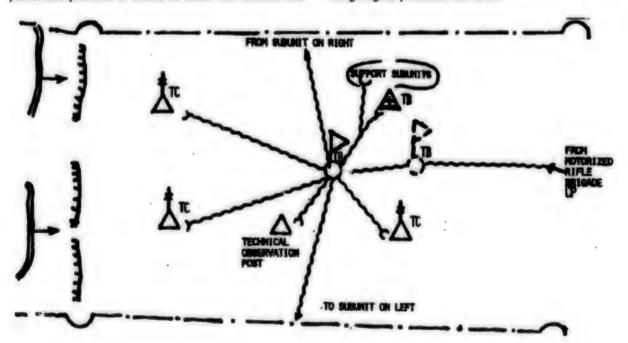


Fig. 3. Organization of land-line communications in a tank battalion in a defense (variant)

It is desirable to run lines from the tank battalion command-observation post to command-observation posts of companies and support subunits by links based on available personnel and equipment. To reduce cable expenditure, it is possible to accomplish communications with several subscribers over one line.

When tank companies are assigned to reinforce motorized rifle battalions, it is necessary to provide for communications with them via the command-observation posts of those battalions.

Coordination communications in a tank battalion is organized over wire lines just as in the motorized rifle battalion.

It should be noted here that in the initial period of war, when a tank battalion is assigned a defense area in advance, the command and control system can be based on fixed communications lines which are prepared in advance and can be run to each tank.

That method of organizing communications would play a positive part for the conditions of a position defense during which an area will be held stubbornly and tanks will be employed for direct fire. True, in this case it will be necessary to come up with several dozen additional telephone sets, but the game is worth the candle, as they say. This problem is eliminated, however, if R-174 tank intercoms are installed in fighting vehicles as means of internal communications and switching and for supporting external two-way cable communications with magneto ringing.

Thus land-line communications, having a number of positive qualities, will be used rather widely in a defense conducted by a tank battalion. The link is the basic method of organizing it, with the number of links depending on the tank battalion commander's decision for battle, on the alignment of the battle formation, and on a number of other factors. But the signal officer must make changes promptly in conformity with the situation in each specific case in order to provide the commander and staff with uninterrupted command and control of subordinate subunits.

COPYRIGHT: VOYENNYY VESTNIK No 12 1993

### AIR, AIR DEFENSE FORCES

Opportunities for Officer Education Advertised 94UM0316A Moscow KRASNAYA ZVEZDA in Russian 23 Mar 94 p 2

[Article by Main Directorate for Cadre Training and Assignments Senior Officer Colonel Yuriy Maksimov: "The Kutuzovs of the Third Millennium: Whom Russian Federation Ministry of Defense Military Schools Await"]

[Text] In all times there has been no more honorable profession than the profession of armed defender of the Fatherland. Russian history is rich with examples of soldiers' selfless courage and fortitude. The names of Nevskiy,

Suvorov and Kutuzov, Nakhimov and Kornilov, Great Patriotic War Military Leaders Zhukov and Rokossovskiy, Konev and Vasilevskiy, and many others have become part of the glorious history of the Russian Armed Forces for all time.

And today the desire to link their lives with the army arises in many young people when they ponder their fate.

The editorial staff has already published articles on admissions requirements to a number of military schools (KRA-SNAYA ZVEZDA, February 5 and 12, March 5 and 12, 1994). Today we are continuing the cycle of articles that describe Russian Federation Armed Forces PVO [Air Defense] Troops, Military Construction, Motor Vehicle and Rear Services educational institutions.

Soldiers and sailors, sergeants and petty officers, regardless of specialty or term of service, and also military reservists among those servicemen released into the reserve who are no older than 23 years of age, and civilian youth who are from 17 to 21 years of age, inclusively, in the year of admission are admitted to all of the schools and the overwhelming majority of them are higher schools.

Since 1993, only Russian Federation citizens are being admitted to Russian Ministry of Defense schools. Individuals who reside on the territory of the CIS member-states, the Baltic states or the Republic of Georgia can enter Russian military educational institutions only after acquiring Russian Federation citizenship. Those individuals who present a certificate or other document that confirms Russian citizenship are admitted to the selection process.

All of the documents required for entrance are completed by the commanders of Russian Federation Ministry of Defense military units, institutions, enterprises and organizations that are deployed on the territory of the CIS member-states and the Baltic states. In this case, young people are not required to mandatorily submit a character reference from the place of employment or study. They are reimbursed for travel expenditures when summoned from the place of residence to the military educational institution and, if not admitted—for the return trip.

The candidate selection process for military VUZ's [higher educational institutions] is carried out through a comprehensive assessment of the personality of each candidate according to the following divisions: moral qualities; military-professional orientation and individual psychological qualities; state of health; physical preparedness; and, general education training.

Candidates take entrance examinations in the range of the middle school program, as a rule, in the Russian language (composition or dictation), mathematics (written), and physics (oral). Matriculation of candidates at a school is carried out on a competitive basis based upon the results of the selection process.

The following individuals are matriculated without checking knowledge on general education subjects (under

the condition of compliance with all other selection process requirements upon matriculation at the school): graduates of Suvorov and Nakhimov schools; individuals who have completed the first and subsequent courses of civilian VUZ's in specialties that correspond to the specialty of that military educational institution and who meet other established requirements.

Individuals who have been awarded gold (silver) medals upon completion of middle school, those who have completed middle special educational institutions or middle professional-technical schools with a diploma with distinction or who satisfy all of the other requirements for matriculation at the VUZ's take one examination in the specializing discipline that is determined by the head of the school. If a grade of 5 (five) is received, they are released from having to take any other examinations.

Orphaned children who are not being cared for by their parents are admitted into the school on a noncompetitive basis based upon the results of the selection process when they obtain positive assessments on general education subjects.

Young people who desire to enter a school submit requests (applications). Servicemen—addressed to the military unit commander where they indicate their military rank, last name, first name and patronymic, position held, year and month of birth, education, and the name of the military educational institution which they wish to enter. To the request they attach a copy of a birth certificate and middle education certificate (a notarized copy of the secondaryschool diploma, certificate, diploma, or certificate of birth), three certified photographs (without headgear, 4.5x6 cm size), an autobiography, a character reference (compiled in accordance with the requirements of the admission rules for Ministry of Defense VUZ's), and the service record. The original education certificate is submitted by servicemen upon arrival at the location where the selection process is conducted and where the entrance examinations are administered.

Army and navy warrant officers, compulsory service and extended service military personnel submit requests by I April of the year of matriculation at the school.

Unit commanders send compulsory service military personnel, who have been selected as candidates for matriculation at a school, to 25-day training assemblies which are conducted at the schools from 5 through 30 June of the year of matriculation for studies.

Civilian youth who wish to enter a school submit an application to the rayon (city) military commissariat at their place of residence or directly to the military educational institution by I May of the year of matriculation. In the application, they indicate their last name, first name and patronymic, year and month of birth, address of the place of residence, the name of the military educational institution which they wish to enter (regardless of the availability of a VUZ in the calculation for the selection of candidates for that military commissariat).

They attach an autobiography, a character reference from the place of employment or study (compiled in accordance with the requirements of the admission rules for Ministry of Defense VUZ's), a copy of a middle education certificate (students of middle schools submit information on current progress), three photographs (without headgear, 4.5x6 cm size) to the application. The candidate personally submits a passport, military service card or residence certificate and the original middle education certificate to the school's admissions board.

Candidates are informed about their arrival time and the location at which they will undergo the selection process by 25 June. Candidates live in dormitories or barracks and they are provided with food free-of-charge based upon the standards for compulsory service military personnel during the period when the admissions examinations are being administered and the selection process is being conducted. During the period of study, cadets are provided with all types of allowances (monetary, clothing, and rations). They are annually granted a 30-day leave and a two-week winter holiday.

In accordance with the Russian Federation Law "On Military Obligation and Military Service", this year all military school cadets, after completion of the first year (upon reaching their 18th birthday), conclude a contract for the period of study and five years of military servica fee graduation from the school.

Individuals who have graduated from a school are awarded the military rank of lieutenant, are issued a state diploma, and are guaranteed an assignment to an officer position in accordance with the specialty and skill attained.

In accordance with the Russian Federation Law "On the Status of Servicemen", all officers who have successfully completed a military school enjoy a number of significant privileges. They are granted an annual 30 to 45 day leave. The duration of the primary leave is increased by a period of up to 15 days if they are performing service in the areas of the Extreme North or at other locations with unfavorable climactic and ecological conditions.

Besides a salary for position and rank, officers who conscientiously perform their assigned duties can be paid a lump-sum monetary award in the amount of no less than three salaries, based upon the results of the training year and the unit commander's decision. Additionally, an officer is paid no less than one salary when he departs on leave.

Servicemen are provided with messing at their duty location or they are issued food rations (monetary compensation). They also receive clothing and related gear free-of-charge depending on the conditions of the duty being performed. Upon their request, contract servicemen can be paid monetary compensation in the amount of the cost of these items instead of being issued individual items of clothing.

The state guarantees that housing will be provided to servicemen. Payment for it is conducted on a beneficial basis. After release into the reserve, officers who do not have housing or who require improved housing conditions are provided subsidized financial assistance at the expense of the Russian Federation Ministry of Defense.

Russian Federation laws prescribe another entire series of benefits for those who devote their lives to the Armed Forces.

Rear Services Milita	ary Educational Institutions
Military Educational Institu- tions	Specialty. Skill. Period of study
Volsk Rear Services Higher Military School, Volsk-3, Saratov Oblast, 412680	Command tactical rations provisioning specialty. Engineer-economist. 4 years.
	Command tactical clothing and related gear provisioning specialty. Engineer-economist. 4 years.
	Command-engineer rations provisioning specialty. Engineer-economist. 5 years.
	Command-engineer tactical clothing and related gear provisioning spe- cialty. Engineer-economist. 5 years.
Nizhniy Novgorod Rear Services Higher Military School, D-125, Nizhniy Novgorod, 603125	Rear services support of ships and Naval units. Engineer-economist. 5 years.
	Rations provisioning. Process engineer. Mechanical engineer. 5 years.
	Clothing and related gear provisioning. Process engineer. 5 years.
	Command tactical clothing and related gear provisioning specialty. Engineer-economist. 4 years.
	Command tactical rations provisioning specialty. Engineer-economist. 4 years.
Moscow Road and Engineer Troops Higher Command School, Balashikha-9, Moscow Oblast, 143909	Command-engineer tactical road troops specialty. Lines of communi- cation engineer. 5 years.
	Command-engineer tactical civil defense troops specialty. Mechanical-engineer-rescuer. 5 years.
Ulyanovsk Higher Military Technical School, Ulyanovsk, 432050	Command engineer tactical support liquid fuel specialist. Engineer-economist. 5 years.

Air Defense Troops Military Educational Institutions				
Military Educational Institutions	Specialty. Skill. Period of study			
Pushkin Higher School of PVO [Air Defense] Electronics, Push- kin, Leningrad Oblast, 188620	Electronic-computer equipment. Electronic equipment engineer. 5 years.			
	Electrical Systems and equip- ment. Electrical engineer. 5 years			
	Automated command and con- trol systems software support. Software engineer. 5 years.			
Affiliate of Pushkin Higher School for PVO Electronics, Kubinka-2, Odintsovskiy Rayon, Moscow Oblast, 143070	Radio engineering equipment specialty. Radio engineer. 5 years.			

St. Petersburg Higher School of PVO Electronics, 324, St. Peters- burg, 198324	Command Tactical PVO Troops specially. Radio engineering sys- tems operations engineer. 5 years.
	Automated command and con- trol systems. Electronic equip- ment engineer. 5 years.
	ASU [automated command and control system] software support Software engineer. 5 years.
Krasnoyarsk Higher Command School of PVO Electronics, Kras- noyarsk-43, 660053	Command Tactical PVO Troops specialty. Radio engineering sys- tems operations engineer. 5 years.
Nizhniy Novgorod Higher PVO Surface-to-Air Missile Command School, D-23, Nizhniy Novgorod, 603023	Electronic systems. Radio engi- neer. 5 years.
Engels Higher PVO Surface-to- Air Missile Command School, Engels-9, Saratov Oblast, 413109	Radio engineering systems. Radio engineer. 5 years.
Yaroslavl PVO Higher Surface- to-Air Missile Command School, Yaroslavl-16, Oblast, 150016	Radio engineering systems. Radio engineer. 5 years.
	Automated command and con- trol systems. Electrical equip- ment engineer. 5 years.
Armavir Higher Military Avia- tion School for Pilots, Armavir, Krasnodar Kray, 352918	Command tactical aviation spe- cialty. Pilot-engineer. 4 years.
	Navigation tactical aviation spe cialty. Pilot-engineer. 4 years.
Stavropol PVO Higher Military Aviation Engineering School, Stavropol-21, Kray, 355021	Command tactical aviation spe- cialty. Mechanical-engineer. 5 years.
	Aircraft and power plants. Elec- trical engineer. 5 years.
	Aircraft equipment. Radio engi- neer. 5 years.
	Avionics. Electromechanical engineer. 5 years.
	Aircraft weapons. Electrical equipment engineer. 5 years.
	Automated command and con- trol systems. Air traffic control engineer. 4 years.
Lomonovskiy PVO Military Avi- ation-Technical School, Lebyazhye, Lomonovskiy Rayon, Leningrad Oblast, 188510	Aircraft and aircraft engines. Mechanic-technician. 3 years.
	Aircraft weapons. Electromechanical technician. 3 years.
	Aircraft electrical equipment. Electrical technician. 3 years.
	Radio engineering systems. Radio technician. 3 years.
	Avionics. Electrician techr cian. 3 years.

# Main Motor Vehicle Directorate Military Educational

Matitutions	
Military Educational Institutions	Specialty. Skill. Period of study
Ryazan Higher Military Motor Vehicle Engineering School, Ryazan-14, 390014. Telephone: (0912) 76-12-80, 76-78-23.	Motor vehicles and motor vehicle management. Mechanical engi- neer. 5 years.
Chelyabinsk Higher Military Motor Vehicle Engineering School, Chelyabinsk-29, 454029. Telephone: (3512) 35-26-12	Motor vehicles and motor vehicle management. Mechanical engi- neer. 5 years.
Ussuriysk Higher Military Motor Vehicle Command School, Ussuriysk-21, Primorskiy Kray, 692521. Telephone: 27-35-22, 27-33-29.	Motor vehicles and motor vehicle management. Mechanical engi- neer. 5 years.

### **Construction Military Educational Institutions**

Military Educational Institutions	Specialty. Skill. Period of study
ENGINEERING	
Military Engineering Construction Institute, 22 Ulitsa Zakharyevskaya, D-185, St. Petersburg, 191185. Telephone: 278-82-02, 275-83-69.	Industrial and civil construction. Civil engineer. 5 years.
	Hydraulic construction. Civil engineer. 5 years.
	Heat and gas supply, ventilation and protection of the air supply. Civil engineer. 5 years.
	Water supply, sewage, rational utilization and protection of water resources. Civil engineer. 5 years.
	Lift-transport, cor struction, road machinery and equipment. Mechanical engineer. 5 years.
	Facility electrical supply. Electrical engineer. 5 years.
	Electrical power engineering sys- tems and networks. Power engi- neer. 5 years.
	Industrial thermal power engi- neering. Thermal power engineer. 5 years.

Remarks: A 3-year term of study at the institute has been established for citizens who have a middle professional education and also for students who have completed the third and fourth year of civilian educational institutions of higher professional education.

Pushkin Higher Military Engineering Construction School, 2 Sovetskiy Pereulok, Pushkin—St. Petersburg, 189620. Telephone: 476-39-95, 466-43-63.	Industrial and civil construction. Civil engineer. 5 years.
	Water supply, sewage, rational utilization and protection of water resources. Civil engineer. 5 years.
Facility electrical supply. Electrical engineer. 5 years.	

COMMAND-ENGINEERING	
Kamyshin Higher Military Command Engineering Construction School, Kamyshin-10, Volgograd Oblast, 403850. Telephone: 6- 95-23, 6-95-12.	Industrial and civil construction. Civil engineer. 5 years.
	Water supply, sewage, rational utilization and protection of water resources. Civil engineer. 5 years.
	Lift-transport, construction, road machinery and equipment.  Mechanical engineer. 5 years.
Tolyatti Higher Military Command Engineering Construction School, GSP-681, Tolyatti, Samara Oblast, 445681. Telephone: 32-78-87, 32-60-61, 32-62-72.	Facility electrical supply. Electrical engineer. 5 years.
	Industrial and civil construction. Civil engineer. 5 years.
Fire safety. Fire prevention equipment and safety engineer. 5 years.	

### S-300PMU Demonstrations at Kapustin Yar

94UM0341A Moscow VESTNIK PROTIVOVOZDUSHNOY OBORONY in Russian No 12, Dec 1993 pp 12-14

[Article by Colonel Valentin Valentinov, under the rubric: "Combat Training": "There Are No Equals to the System"]

[Text] An international aerospace show took place in Moscow from 31 August through 5 September. The first Russian international "Arms, Military Equipment, Conversion" Exhibition was conducted right after it from 8 through 13 September in Nizhniy Novgorod. On the eve of these impressive measures, the PVO [Air Defense] Troops command authorities, with the participation of the general and chief designers of a number of defense firms, conducted a demonstration on Kapustin Yar range of the combat capabilities of a number of the most modern air defense systems that are being offered for export.

They already truthfully say: Seeing is believing. I admit that I had not even assumed how impressive and entertaining combat launches of missiles against actual airborne targets can be.

The S-300PMU1 Air Defense Missile System is capable of intercepting and destroying modern combat aircraft, cruise missiles, and even projectiles in a wide range of altitudes and speeds and with practically a 100% probability. Experts state that so far systems have not yet been developed in the world that could effectively counteract this system. I personally do not have any doubts whatsoever on this score after I visited the Kapustin Yar PVO Test Range.

The Kapustin Yar PVO Test Range was created on 6 June 1951. It is located in a steppe zone in the Trans-Volga completely on Russian territory and is comparable in area

with the territory of a small European state. Practically all domestically-produced air defense missile systems, airborne target radar detection systems and automated information processing and PVO Troops command and control systems were tested here. More than 20,000 launches of various missiles have been conducted on the range in the time that has passed.

"Our range has a developed network of measurement facilities that form a continuous measurement field, a unique experimental facility, and the most modern simulation systems," noted Range Chief Major-General Stanislav Kurchevskiy. "All of this opens the prospect to the range of becoming the Russian Federation State Scientific-Research Test Range on which work would be accomplished not only on behalf of PVO but also the other services of the Armed Forces. We have specific proposals on the development of a permanently operating international arms sales-exhibition with training of foreign armies' combat crews in practical operations at the range."

I must say that definite steps are already being made in that direction. For example, a Kuwaiti delegation visited here recently. Having become thoroughly familiar with the range's capabilities and also with the modern airborne enemy radar detection systems, automated command and control systems, and air defense missile complexes, the delegation expressed the desire to not simply continue contacts but also to transfer them to the practical level.

We can understand the Kuwaiti experts. Our air defense systems have a number of undeniable advantages over similar Western systems, including the American Patriot. The S-300PMU1 Air Defense Missile System graphically demonstrated that at the recent arms exhibition at Abu-Dhabi. After a series of successful launches, the newspapers called this system the "star" of the exhibition. The glory of the vaunted Patriot noticeably faded into the background. There's no doubt that success awaits the S-300PMU1 at the impending airshow and exhibition.

The S-300PMU1 mobile multichannel air defense missile system is designed to destroy modern and future aircraft, cruise missiles, ballistic targets and other offensive air weapons systems. It consists of a multi-function target illumination and guidance radar, up to eight launchers with four missiles each (a full basic load of 32 missiles), and a command and control facility. The unit's systems are mounted on off-road chassis.

Deployment time on terrain is five minutes. Each S-300PMU1 system permits the conduct of simultaneous firing against up to six targets with guidance of two missiles to each target. Thanks to the vertical launch of the missiles, there is the capability to destroy targets that are flying from any direction. The system's operating range is up to 150 kilometers, minimum target destruction altitude is 10 meters and maximum target destruction altitude is the service ceiling of employment of combat aircraft. The system is capable of operating both in the autonomous mode and under command and control commands from a higher headquarters command post.

Raising the antenna mast on a tower has been provided for when conducting combat operations under conditions of mountainous or forested terrain, thanks to which an increase in target detection range, especially of low-altitude targets, is achieved. The system is equipped with aircraft identification friend-or-foe equipment. The S-300PMU1's general developer is "Almaz" Scientific Production Association [NPO].

Having obtained information on the possible employment of cruise missiles by the "enemy", the combat crews of Lieutenant Colonels Viktor Skalkin and Sergey Murashov began to deploy the system. The target illumination and guidance radar was the first to occupy its place on the operational position, then—the launcher and, behind it—the command post. The system began to bring itself to combat readiness practically without the interference of the combat crew. Various hatches were opened, artennas were extended and unfolded, and missile canisters assumed the combat position. "The radar is in the combat-ready position...", "The launcher is in a combat-ready state...", "The radar is in the combat-ready position...", the reports follow one after the other.

The radar detection equipment tracked an airborne target, similar to a cruise missile, during all of this time while the deployment of the system took place. Command and control was conducted from "Baykal-IE" and "Senezh-MIE" automated command posts. High mobility, jamproofing, and uninterrupted command and control was achieved in this manner.

The "Baykal-1E" high-capacity and "Senezh-M1E" medium-capacity PVO formation mobile, automated command and control systems are designed for command and control of the S-300PMU1 (PMU) air defense missile system, S-200VE air defense missile system, S-75 and S-125 type air defense missile complexes and also fighter aircraft of all types. "Baykal-1E" supports command and control of up to 12 air defense missile complexes and air defense missile systems (up to 72 firing channels), and the 'Senezh-M1E"—up to 17 air defense missile complexes and air defense missile systems (up to 77 firing channels), and also up to six fighter aircraft. The systems permit bringing the formation up to combat readiness, support target allocation and target designation of the air defense missile complexes and air defense missile systems, coordinate the combat operations of weapons, conduct combat documentation, and accomplish a number of other missions. "Baykal-1E" is capable of simultaneously processing up to 80 airborne targets and "Senezh-M1E"-up to 120 airborne targets—on a territory of up to 600 km along the front and in the depth. The general developer of the systems is "Proton" Scientific Production Association.

The leader for conducting this experiment, Deputy Range Chief for Scientific and Experimental Work Colonel Vyacheslav Korolev, reports that target designation is transmitted from the command post to the S-300PMU1 air defense missile system. Now target tracking is carried out already directly from the complex. A minute passes, another, and ... It seems not only the air but the entire Trans-Volga steppe shudders from the powerful roar of jet engines. One behind the other, two missiles are catapulted from canisters, they hang over the launcher for an instant

and they rush toward the target that is traveling at an altitude of 3,000 meters on a course toward the protected target. After several seconds, a shaft of flame breaks out in the sky—the target has been destroyed. Fragments of the cruise missile fall to the ground, trailing a tail of black smoke behind them. But the experiment does not end with that.

Information arrives from the command post that another target—a low-observable cruise missile flying at an altitude of just 10 meters—has appeared in the PVO formations's zone of responsibility. The S-300PMU1 is once again involved in combat operations, begins tracking the target and conducts a launch.

This time the missiles initially rapidly rush upward then abruptly change flight trajectory and attack the target. The unbiased monitoring device records a direct hit.

"It operated marvelously!" "Fakel" Machine Building KB [Design Bureau] General Designer Vladimir Svetlov did not restrain himself. "Fakel" Machine Building KB is the same one where the missile was developed for the \$300PMU1.

"Fakel" Machine Building Design Bureau is the leading developer of air defense guided missiles and their modernization. The K-5 air-to-air missile was the first missile developed here. The V-750 missile that was developed for the S-75 air defense missile complex brought great fame to the KB. The U.S. U-2 spy plane was shot down near Sverdlovsk by that missile on 1 May 1960. The missile has been widely exported abroad and has participated in various military conflicts. It has destroyed approximately 3,000 airborne targets.

The KB's pride is the V-1000 antiballistic missile that was also developed at the beginning of the 1960's. The V-1000 carried out the interception and destruction of a ballistic missile warhead for the first time in the world. The United States could only repeat a similar experiment 23 years later. Later "Fakel" designers developed missiles for the S-125 air defense missile complex, the S-200 air defense missile system, the "Osa" systems and others.

The 5V55 single-stage, solid fuel missile that was designed for the S-200 and "Rif" air defense missile complexes occupies a special place among them. This is the first missile in domestic and world practice that was developed based upon the principles of guaranteed reliability. It is being placed in the troops in special transport-launch canisters and does not need any kind of inspections or adjustments for 10 years. The principle of tracking a target through a missile is utilized during guidance to the target, that is, it can be guided not only by command and control commands that are being transmitted from the target illumination and guidance radar but also through information that arrives from the onboard direction finders of the missile itself. High jam-proofing and target destruction accuracy, including of maneuvering targets, is attained in this manner. The missile has a proximity fuze and high yield fragmentation warhead.

The "Volkhov" Air Defense Missile Complex displayed outstanding results during the course of the experiment's tests that were conducted within the framework of the program. It destroyed all targets with the first launch.

The mastery of the combat crews and the unique capabilities of the weapons system had to enchant. But, in my view, the good relations and the mutual understanding between the developers of these systems and those who order and operate them in line units cause no less enchantment. As ordering PVO Directorate Representative Major-General Aleksey Moskovskiy, "Almaz" Production KB Chief Designer Aleksandr Lemanskiy, "Proton" NPO Deputy General Director Yakov Bezel, and other comrades noted at the press conference that took place immediately after the experiment, that mutual understanding has been achieved in the PVO Troops. And that is a good sign that henceforth we will have something with which to defend the Fatherland's air borders and there will be something to offer to our potential purchasers abroad.

COPYRIGHT: Vestnik PVO, 1993

### Improvements to MiG-29

94UM0341B Moscow VESTNIK PROTIVOVOZDUSHNOY OBORONY in Russian No 12, Dec 1993 p 40

[Article by Colonel Valentin Rodnev, under the rubric: "Equipment and Weapons Operation": "MiG-29M: A New Kind of Role"]

[Text] The MiG-29M light multirole fighter aircraft was developed at the Design Bureau imeni A.I. Mikoyan as a result of the thorough modernization of the MiG-29 fighter aircraft that is well known in our country and abroad. It's not surprising that externally these aircraft are very similar. But essentially the MiG-29M is a qualitatively new aircraft. When they accept it into the inventory, even its name will probably be different.

But then again, the matter is not in the name, thinks Chief Designer Valeriy Novikov. The essence of the aircraft is important. Having totally preserved and developed the qualities of its predecessor—the air superiority combat aircraft, the MiG-29M acquired a new kind of role—an aircraft system capable of effectively operating against land-based and naval surface targets. The employment of practically the entire range of domestically-produced air-to-surface missiles, including guided missiles with television and laser seekers, guided aircraft bombs, and other precision-guided weapons has been provided for on the fighter aircraft. Furthermore, there is a 30-mm aircraft cannon with high firing accuracy and 80-, 130- and 240-mm unguided rockets in the MiG-29M's arsenal.

Here are the MiG-29M's primary flight-technical specifications. Crew - 1 person, engines - 2 x RD-33K, take-off weight: normal—15,300 kg, maximum—19,700 kg, maximum Mach number—2.3 m, service ceiling 17,000 m, thrust-to-weight ratio on take-off—1.1, operational Gload—9, take-off run—250 m, landing run—600 m, flight range (km) with additional fuel tanks—3,200, without additional fuel tanks—2,000.

The MiG-29M has nine hardpoints. The bomb load on it has been increased to 4.5 tonnes. The pilot can carry out operating mode control and weapons selection without removing his hand from the throttle quadrant or control stick. The multichannel pulse-Doppler radar installed on the fighter aircraft supports tracking of up to 10 targets and simultaneous firing against up to four targets, and also cartography of terrain, image "freezing", etc.

According to expert assessments, the MiG-29M's effectiveness during operations against ground-based targets is almost 3.5 times higher and, during operations against airborne targets—two times higher, than the MiG-29's. Based upon its flight-technical and combat specifications, our fighter aircraft exceeds its foreign equivalents and prototypes, including the F-16C, F-18, "Mirage-2005", Rafale, and also the European fighter aircraft that is being developed right now. It also outstrips them in the aircraft development cycle by 1.5-2 years.

Everyone who participated in the test flights noted the aircraft's very high controllability. Composite materials are widely utilized in the design of the aircraft and the foreign object damage [FOD] engine protection system has been fundamentally changed. This has permitted increasing the fuel reserve by 1,500 liters while maintaining practically the same "dry" weight as the MiG-29, which in turn has provided a substantial increase in the fighter aircraft's operating range (by more than 40%).

The MiG-29M completed its first flight in 1986. Former Firm Chief Pilot, Hero of the Soviet Union Valeriy Menitskiy took-off in the fighter aircraft for its first flight.

The MiG-29K, the carrier version of fighter aircraft, was developed in parallel based upon the MiG-29M. But work has been terminated on this program at the present due to the lack of financing.

Storm clouds are also thickening over the MiG-29M. The preliminary conclusion on beginning series production of the MiG-29M at Moscow Aircraft Production Association, the oldest aircraft production association in Russia, was already obtained in 1991. However, there still has not been a decision on the initiation of series production.

COPYRIGHT: Vestnik PVO, 1993

### **NAVAL FORCES**

Navy's Experience with Contract Recruitment 94UM0314A KRASNAYA ZVEZDA in Russian 19 Mar 94 p 3

[Article by Vladimir Maryukha: "The Contract Is Good. But Is It Better Without It?: The Mixed Principle for Bringing the Armed Forces up to Strength Removes Some Questions but Raises Others"]

[Text] I do not want to offend the representatives of other branches of the Russian Armed Forces, but historically it has happened that the navy was the source of many reform ideas. There they introduced contract service two years before the official appearance of the first contract personnel. It may have been done as an experiment, but the seamen were the first. And the specific nature of service on board ships is such that these contract personnel were the first to encounter the problems and difficulties that are yet to be experienced in other service branches.

Although it is not being widely acclaimed, the navy is certainly the leader in the number of contract personnel in the "first levy." For this reason, the quota of the navy in the coming "call-up" of 150,000 is somewhat smaller, which makes it possible if not to breathe more easily, (the report on the results of the first levy of contract personnel was required on...the second day after the decision on hired service), than at least to summarize some results. And in the first reading they are as follows:

The navy accepted more than 31,000 persons wishing to volunteer for contract service. The "recruiters" (we have to get used to this term) worked best of all in the Northern Fleet, where a little more than half of all contract personnel of the navy serve today. And this is not surprising. It was the Northern Fleet that started the experiment on contract service. Among the advantages is the fact that the navy has the lowest percentage of people who break contractsabout 7 percent compared with the average of about 16 percent for all of the armed forces. And 46.6 percent of the contracts were rescinded at the initiative of commanders because of the lack of discipline of the "mercenaries", and another 44 percent because they did not conform to the needs of the service. As we see, the selection was rather severe but it did not do away with a number of inconveniencies.

Only one-third of those signing contracts last year were being discharged to the reserves or were reserve personnel with a military service obligation. Hence, the professionalism of the remaining 66 percent is nothing more than a wish, for they are seamen who are required to be there for the first year. On the one hand, it is so that the contract personnel have the right to demand a qualitatively different attitude of commanders toward themselves than toward draftees. On the other hand, the only difference between them and the draftees is the payment for their service time. Essentially, there is no difference in the training of such contract personnel and the retraining of those called up from the reserves. They have to learn directly at the military post while on alert duty, or on watch.

Of course it is possible and necessary to learn military affairs "in a natural way" in a training subunit. But on one's own account, as it turns out. As they explained to me in the General Staff directorate of the navy that deals with the selection of future contract personnel, a serviceman signing a contract receives only half of the monetary remuneration due him during the time of his training. The paradox is that it is absolutely "copied" from the system of the vocational and technical schools. There they "deduced" that they should pay only half of the wage for work done during the period of practical training, whereas

here the contract serviceman pays for the specialized skill that the navy needs. He also pays for his "suitability" for service; he pays for going through the medical examining board at the direction of the military commissariat. But this, they say, is not so bad.

Where is the professional contract serviceman needed above all? Of course it is where it is necessary to handle the weapons and equipment that determine the combat readiness of the navy. But where are the contract personnel going to serve? As the "recruiters" themselves joke bitterly, contract vacancies have been completely filled at warehouses and food depots. And that is understandable: Being farther away from the command and closer to the kitchen is a well-known principle in the soldier's attitude toward his service. Vacancies are 18 percent filled on submarines and 27 percent on surface ships.

Nor are contract personnel eager for positions as lowerechelon commanders or CPO's in charge, although they are paid more than seamen. Not always, however. On a nuclear submarine, for example, the wage "cell" of the squad leader in the reactor compartment is less than that of seamen. And all of this is because when they they were setting up this "table of ranks" the typist apparently forgot to type in the word "starshina" [ranking NCO]. Therefore, there is no formal basis for the payment of wages to noncommissioned officers subject to the same degree of risk that are even equal to those of seamen. The squard leaders and chief petty officers in charge have much more to worry about than do the seamen and different demands are placed on them. And given the fact that the army and navy have long since lost their lower-echelon commanders, having limited confidence in them and substituting officers for all kinds of minor tasks, the contract personnel are in no hurry to change the stereotypical behavior characteristic of inducted noncommissioned officers, and the positions remain vacant.

Nor should one be happy with the fact that the initial plans for the signing of contracts have been fulfilled and overfulfilled. It will be possible to summarize the results only when the first three-year period of the contract is over—on the basis of the number of contracts that are extended. Then and only then will it be possible to say that true professionals have appeared in the Russian forces in terms of the level of special knowledge and choice of profession. The forecasts are not so rosy here, primarily because a true professional will not extend a contract when the side doing the hiring fails to observe the conditions stipulated in the contract.

It will scarcely come as a revelation that the "military package" of laws of the Russian Federation is not being fully implemented. For the contract serviceman, this means the nonobservance of the conditions of the agreement. If that is so, then practically any contract serviceman has the right not only not to extend, but also to suspend an unfair agreement on his own initiative. In our propaganda literature of past years, there was for a long time a prevalent theme that depicted "their customs." It was said that the American soldiers in Vietnam would refuse to attack if the ice cream shown on their menu was not

brought to them. What kind of "attack" will a Russian contract serviceman make when he and the officers serving at his side are not paid for several consecutive months? Beyond that, there is no housing, privileges exist only on paper, and the very statute on contract service remains provisional and has not yet been affirmed by the government.

This "provisional" spirit could be seen even when the "contract" experiment was getting under way in the navy. And KRASNAYA ZVEZDA was publishing articles at that time that were sounding the alarm: Where will the professional seaman go if no one is waiting for him on the shore? Our gloomy forecast is being confirmed today; only racketeers await the contract serviceman on the shore. At least cases of civilian racketeering against contract personnel have already been noted at some northern posts of the navy. Among other "pleasures," the shore offers the serviceman with money liquor and prostitutes specializing precisely in citizens of this category who have a need to satisfy their healthy instincts.

At the same time, at the northern bases of Vidyayevo and Gadzhiyevo, for example, there are empty houses that with the appropriate effort could initially provide a comfortable home for professional service personnel. Alas, there are no funds for their restoration and none are foreseen. Under analogous conditions in the Pacific Fleet, one of the units took this course: Without waiting for funding, they put up a house using those same contract personnel. They lost some of their specialists, but something has been started for the future. But, as you yourselves understand, that is by no means the way out. Where is it?

In the United States, the transition to a professional army took a decade. And this is with the economy that they have and their ability to count money and profit. Today they are talking about returning to the conscription system of manpower acquisition. Above all it is because the mobilization reserve leaves something to be desired in terms of the level of its professional training. We are once again trying to invent our own "bicycle." And there is a written order: To bring the crews of ships and submarines up to full strength with contract personnel. But what if they all want to break their contracts at the same time? Such a thing is quite possible if the state fails to fulfill its obligations to those hired for military service and a court, if it is truly fair, will not be on the side of the employers. Who will then go to sea and who will take the place of the nonexistent professionals at the machines?

Alas, this is a most superficial spectrum of unresolved questions that are arising in connection with the mixed manpower acquisition of the Russian forces. Of course it is a good thing to have a small professional army that is not very burdensome to the state. But to do this it is necessary to make a major effort in the stage of its establishment and to invest much more in it at that time in comparison with subsequent expenditures. Time is needed for the contract serviceman to become a professional and for officers to learn to treat him as a professional rather than as a conscript who is just fulfilling his service obligation. It is necessary to have laws and to observe them unfailingly.

Contract service lacks all of this and much more and hence there will not be the expected effect. And then you will see that what was generally good will be ruined. So is it better without the contract?

The answer to this almost rhetorical question is unequivocal—no. A mixed principle of manpower acquisition is needed and even very much so, especially right now, when the army and navy have felt the first "relief" with the appearance of the first contract servicemen in the units and on the ships. But it is also necessary to resolve the urgent questions. Otherwise we will remain not only without contract personnel but also without any armed forces at all.

# Final Verdict on Komsomolets Remains Incomplete

94UM0317A Moscow KRASNAYA ZVEZDA in Russian 22 Mar 94 p 7

[Article by IZVESTIYA correspondent Yevgeniy Solomenko: "The Battle of the Admirals Over the 'Komsomolets'"]

[Text]

### Reciprocal Accusations in the Newspapers

Five years have passed since this unique submarine, absolute champion in submersion depth, vanished into the abyss of the Sea of Norway, taking 42 crew members with it. It has been three and a half years since the government commission announced its findings on the causes of the disaster. The Military Procurator's Office continues to investigate the circumstances surrounding the loss of the Komsomolets. Old questions remain, and new ones continue to be sought.

The judicial conflict arose out of this search for the truth. It was preceded by the publication of two articles. The first was published in the Petersburg newspaper NEVSKOYE VREMYA. Its author, Vice Admiral and Hero of the Soviet Union Ye. Chernov, accused then commander in chief of the Navy Fleet Admiral Ye. Chernavin of doing everything within his power to conceal the true causes of the loss of the submarine Komsomolets from the people and the Navy.

The response salvo came three months later. Four vice admirals, L. Matushkin, O. Yerofeyev, I. Litvinov and A. Ustyantsev (all four, like Ye. Chernov, recently commanded nuclear submarine flotillas in the North Sea), responded in the newspaper of the Leningrad Naval Base SOVETSKIY MORYAK (now the MORSKAYA GAZETA) in an article titled "We Have the Honor"!

Describing their opponent and recent colleague, the authors of the article did not hesitate to use such expressions as "provocation of a veteran politician," "a type of political chameleon... in the uniform of an admiral" and so forth.

The main thing in the article, however, were not the epithets but the accusation leveled against Chernov. According to the authors, he is responsible for the loss of

the submarine and its crew. This is because, as chairman of the commission for accepting the Komsomolets from industry, he made a deal with his conscience and signed the document on the fitness of a boat which had a large number of major structural deficiencies. Subsequently, in order to relieve himself of responsibility, the article asserts, Chernov forged 21 excerpts from the rescued watch log.

Following the article (which was published in all the fleet and flotilla newspapers as though on command), Ye. Chernov appealed to the Military Collegium of the Supreme Court of the RFSFR for protection against slander in the press. His appeal was transmitted first to one military procurator's office and then another. In September 1992 the Main Military Procurator's Office initiated a criminal case regarding the slander in the press. A year later, however, the plaintiff received a reply from the General Procurator's Office: Investigation halted due to lack of a corpus delicti.

Chernov then turned to the St. Petersburg City Court. It considered the information on the case (the defendant's agents insisted that the process occur behind closed doors) and arrived at a decision. Chernov was not responsible for the loss of the Konisomolets or its crew. Chernov was not chairman of the state commission and had therefore not signed the certification of the boat's fitness, nor did he falsify excerpts from the watch log. The court demanded that MORSKAYA GAZETA publish an appropriate refutation.

The plaintiffs did not contest this court decision nor file a class action suit. That is not the end of the incident, however.

### The Danger to Submarines Is Not Past

Adm. Chernov became acquainted with the Komsomolets in 1983, when it was just coming off the berths. The experimental, deep-water boat was being built for the Northern Fleet commanded by Yevgeniy Dmitriyevich, after all. The Komsomolets soon became the flagship of the flotilla. It sailed 462 days without accident with its first crew.

The Komsomolets was lost 33 months after Adm. Chernov left the flotilla and was appointed chief of the Naval Academy. The former flotilla commander had no peace of mind, however. What had led to the loss of such a reliable boat, which had performed well during its five years of operation?

Under Chernov's supervision specialists of the Naval Academy made a thorough investigation of the disaster and arrived at the conclusion that the accident occurred because a poorly trained crew had been sent to sea. By then the first crew of the Komsomolets, which had been in the process of mastering the experimental submarine since the first days of its existence, had been replaced with a new one (604th in the fleet's numbering system). The new team, however, took over the boat without proper preliminary training. As a result, the first abnormal situation on the autonomous cruise ended in disaster.

The commander-in-chief and the government commission considered these conclusions of the Naval Academy to be without merit.

The troubled admiral still insists, however:

"The 604th crew were sentenced to death. Commander-in-Chief Chernavin, who was essentially co-chairman of the government commission and director of the working commission of the Navy, falsified the causes of the tragedy. He thereby attempted to conceal his blame for the extremely high accident rate of our ships, particularly submarines. The real causes of the accident are not being rectified, the guilty parties are not bearing responsibility, and disasters are therefore being repeated to the same scenario. New ships and crews are being lost as a result. A fine project for a unique submarine was killed, a world record holder in submersion depth. If this project had reached the stage of series production, the Russian Navy would now have a division of these first-class boats without equal in the world.

The tragic chronology goes like this: A disaster on the submarine S-173 in 1981; on the submarine K-429 in 1983; on the submarine K-219 in 1986; on the submarine K-278 in 1989.

Four Soviet submarines (three of them nuclear-powered) were lost in the 9 years preceding the accident; the Komsomolets and two others had fires which resulted in great damage and loss of personnel. A total of 129 submariners left for their final cruises on these boats.

The circumstances of those disasters were investigated under an unbroken cover of secrecy. The Komsomolets was our first ship whose loss was discussed aloud. And now we have this unique court process.

His opponents blamed Adm. Chernov for the loss of the Komsomolets. The court refuted this. We now face the question: If Chernov was not to blame, then who was? And it will hardly be possible to hush up that question, to leave it unanswered.

The years of investigation of the Komsomolets disaster must be completed. Until the truth about the causes of the accidents involving our boats is brought out and made public, we can expect new disasters in the Russian Navy—the K-429, K-219, K-278, the Komsomolets....

Who is next?

### REAR SERVICES, SUPPORT ISSUES

Lt-Gen Solomatin: Housing Crisis Intensifying 94UM0315A KRASNAYA ZVEZDA in Russian 23 Mar 94 pp 1-2

[Interview with Lieutenant-General Anatoliy Vasilyevich Solomatin, chief of the Armed Forces of the Russian Federation for construction and billeting, by Ivan Ivanyuk: "Housing for the Military: A More and More Acute Problem"]

[Text] Lt.-Gen. Anatoliy Vasilyevich Solomatin was born 29 August 1939 in Ryazan Oblast. He finished the Pushkin Military Construction-Technical School and the Higher Military Engineering-Technical School in Leningrad. A significant part of his service was linked with the provision of housing for the forces of Far East Military District, where he advanced from chief of a construction section to deputy commander of the forces of the district. Then, from 1987 through 1991, he was chief of the Main Engineering Directorate, which is the buyer for the air defense forces. In October 1991, he was appointed deputy and, in December 1993, chief of the Armed Forces of the Russian Federation for construction and billeting.

### He is married and has a daughter.

[Ivanyuk] Anatoliy Vasilyevich, your appointment to this high position coincided with the end of the year, traditionally the most intense period for builders. How would you characterize the conditions in which you have to begin work?

[Solomatin] The situation in which the military construction organizations of the Ministry of Defense found themselves, just as, by the way, the contract organizations of the entire construction system of Russia, is so complex that it is difficult to define it precisely. But clearly it can be said that it is critical.

Last year the tolerable financing of capital construction was kept only within the limits of the first quarter. Beginning in April, credits were issued without taking into account the actual indexing. In 1993, the Ministry of Finance of Russia financed just 75 percent of the need. In connection with the unstable financing, we sought to concentrate our efforts in the course of last year on resolving basic tasks, primarily the provision of housing for forces withdrawn from the far and near abroad. The greatest load came for North-Caucasus, Moscow, Volga, and Leningrad military districts. There was a significant reduction of the volume of special construction, for we are obliged above all to resolve the housing problems of thousands of officers and warrant officers who have waited for years to receive an apartment.

[Ivanyuk] What were the results for last year?

[Solomatin] As a result of the measures that have been taken, 62,100 apartments were built through all sources of financing, which is 800 apartments more than in 1992. But this is less than what was planned. In the process, as in previous years, most of the housing was constructed by military builders- 40,200 apartments were obtained under the plan of the Ministry of Defense. Practically all the organizations of the Main Military-Construction Directorate of the center and the Main Directorate for Special Construction fulfilled their annual tasks and they satisfactorily resolved the set tasks in Moscow, Ural, and Siberian military districts. Overall, under different conditions of financing, the military builders worked somewhat better then the organizations of the construction system of Russia that build housing for the Army and Navy under contracts.

The local authorities were very bad about paying back their debts to the Ministry of Defense—only 2,200 of 8,200 apartments were turned over.

We understand that we now need a new approach to the resolution of the tasks facing the military construction system taking into account the economic conditions that have developed in the country and the reform processes that are taking place in the armed forces. The main thing that we can count on at this time is our internal possibilities. We are therefore undertaking a number of organizational measures to improve our work. It is necessary to improve significantly the quality of project planning and construction and the organization of the work at the facilities. We are putting great hopes on the use of contemporary building materials and technologies in the production of structural assembly work and on a better quality of preparation and training of specialists.

In addition, for the purpose of stabilizing the situation and providing housing for officers and warrant officers without apartments, we have begun to establish an official housing stock at the garrisons.

[Ivanyuk] At the present time, have all dwelling housing put into service been occupied?

[Solomatin] Yes, practically all of them except for a few apartments. Essentially the settlement of all of them is under our control, although for a long time it was not possible to settle even finished houses. There was not enough money to purchase sanitary equipment, electric hot plates, and other internal "stuffing" of apartments. This created problems not only for the future inhabitants but also for the builders, who could not turn housing over to customers and were forced to divert significant effort for its maintenance.

[Ivanyuk] Tell us how the State Program for the provision of housing to military personnel in 1993-1995 is being implemented overall. To what extent do the results of the past year correspond to the indicators foreseen for 1993? How well will it be carried out this year?

[Solomatin] As you know, in accordance with this State Program developed under the instructions of the president of Russia and affirmed on 20 July of last year, it is foreseen that dwelling houses for 220,000 apartments will be built for service members in military service and for persons subject to resettlement from closed and isolated military posts using funds allocated to the Ministry of Defense from the republic budget. In addition, another 180,000 apartments will be built under plans of local executive agencies of state authority for service members discharged to the reserves or retirement. The planned volumes of housing construction must make it possible by the end of 1995 to overcome the tendency toward an increase in the number of service members without apartments.

In accordance with this program, the Ministry of Defense expected to obtain 82,100 apartments in 1993 through all sources. But, as I already said, it received 62,100 apartments (compared with 61,300 apartments in 1992). Thus, today the lag already amounts to 20,000 apartments.

As for 1994, the targets under the program amounted to about 100,000 apartments, of which it was proposed that 73,000 be built through the federal budget. But the State Defense Order for 1994 reduced them to the level of 1993—3.7 million square meters, or 61,700 apartments. This is 12,600 fewer apartments than what was foreseen by the State Program. Thus, the total lag for two years will be 32,600 apartments. In the event that the financing is handled as it was in 1993, then the gap may increase further by the end of the year.

[Ivanyuk] As far as I know, the Ministry of Finance and the Ministry of Economics are already thinking of revising the State Program for the provision of housing to service members as being unrealistic....

[Solomatin] The fact that the president of the country emphasized this State Program in his address to parliamentarians shows the great importance that is being assigned to the resolution of the housing question in the Army and Navy. Of course, one must proceed on the basis of real possibilities, but if the program is to be revised then this must be done not from the point of view of the extension of the time of its implementation, but rather with respect to making up for what has been neglected.

I think that the heads of the departments that determine the course of the economic life of Russia understand the acuteness of the housing problem in the Army and Navy no less fully than we do. The number of service members in the Ministry of Defense without apartments is increasing from year to year and now exceeds 130,000. The situation appears even more intolerable with respect to the provision of housing for those who are being discharged to the reserves or retirement. The number of families waiting for housing in their chosen place of residence has increased in the last three years from 26,000 at the beginning of 1991 to 100,000 at the present time.

Last year, Directive No 457-rp from the president of the Russian Federation, dated 23 June 1993, set the limits for capital investments and the targets for persons in the federation with respect to the putting of housing into service for individuals discharged to the reserves or retirement. Initially, the limit of capital investments amounted to 192.6 billion rubles [R]. Taking indexing into account, the figure increased to R366.3 billion. It was also taken to the territories but because of the deficit in the state budget the federal administrative agencies did not execute it.

At the same time, the problem under consideration is characterized not only by a shortage of money but also by its ineffective use because of the lack of proper control. We think that it is necessary to establish the appropriate control system and to place the funds allocated for housing for service members discharged to the reserves or retirement in protected budget categories and to put them in a separate line in the accounts of the Ministry of Finance with the territories.

[Ivanyuk] KRASNAYA ZVEZDA has already written about the financial starvation being experienced by the armed forces. How did this year begin with respect to military construction?

[Solomatin] I think that everyone understands that it is possible to fulfill the program for the construction of housing only under the condition of stable financing. But it continues to be extremely uneven and does not correspond to the prices that actually exist in construction. Thus, in January through March of the current year, the Ministry of Defense has allocated only 3.4 percent of the declared requirement for the year.

As a result of the insolvency of customers, the tasks of the first quarter for the construction of housing for service members and for the provision of the troops being pulled out are not being accomplished. The work of the military construction system is practically paralyzed and construction projects are being suspended because of the lack of

funding to pay for materials and structures. It is very regretable that civilian contract organizations are stopping work at our facilities.

A critical situation has developed in the construction of housing in Moscow. As of today, the indebtedness of the Ministry of Defense to house building combines [DSK] amounts to R8 billion. As a result, as they say, the have run out of patience and DSK-1 stopped building dwelling houses in Golitsyno and Chkalovskoye and DSK-3 terminated it in Chertanovo-Anino, Nakhabino, and on Veshnikh Vod Street. Such a thing never happened in past years. Further interruptions in financing will lead to the complete cessation of military construction projects. We expect that the appeal of the Ministry of Defense to the Government of the Russian Federation in this regard will be examined and supported in the near future.

### **INTERREGIONAL MILITARY ISSUES**

### General Lebed on Dniester Conflict

944K1042A Moscow KOMSOMOLSKAYA PRAVDA in Russian 6 Apr 94 p 7

[Interview with General Lebed, commander of the 14th Army, by special correspondent Arkadiy Khantsevich; date not given: "I Am an Unsuitable Candidate for Whipping-Boy"]

[Text] Tiraspol-Moscow—He is honored among the troops with the respectful "Papa" (this at the age of 43). Moldovan nationalists have christened him "occupier" and "imperialist." Super-patriots in Moscow and Tiraspol abuse him with the words "Judas" and "traitor."

What career has not been predicted for him as of late—from defense minister of Russia through banishment to a remote military district. Aleksandr Rutskoy offered Lebed the chance to become a minister in October 1993—and he received the sole possible response: "You can go and... yourself." More than just the former vice president have experienced the brusque manners of the commander of the 14th Army. The inordinate sharpness of Lebed's opinions go against the grain with many of his present superiors also—the Ministry of Defense even attempted to ban the general's contacts with the press and the public. But subduing or intimidating him is not, apparently, that easy....

[Khantsevich] Aleksandr Ivanovich, is what has been written about you the truth or an invention?

[Lebed] A conventional biography. I am native of Novocherkassk, the capital of the Don Host. I graduated from school there in 1967, I worked there also for two years—a grinder and loader. This whole time I was trying—three times—to enroll in flying school. I was not accepted because of a bad nasopharynx. It was operated on, but I was ultimately still deemed unfit for flying service.

[Khantsevich] And what about the nose, if it is no secret?

[Lebed] I took a blow. In 1969 I enrolled at the Ryazan Airborne School and graduated from it in 1973. At the decision of the school's council I was retained for service there. I was commander of a platoon for three years, and from 1976 through 1981, commander of a company of officer candidates.

In 1981 Heft for Afghanistan as commander of a battalion. Then, the academy: enrolled in 1982, graduated in 1985.

[Khantsevich] Aside from the school and Afghanistan, what do you remember most of this period of service?

[Lebed] As a division commander, I was repeatedly "carousing" around flash points. In the fall of 1988, Sumgait, winter-spring, Baku. April-May of 1989, Tbilisi. The "jacket potatoes" campaign of sorry renown—this was 1990, September. Before this, in January-February, I was, true, in Baku once again. And everywhere I was involved in defending people and preventing them grabbing one another by the throat.

[Khantsevich] Not only the addresses but also the situations in each of these "flash points" were, understandably, different. Do such conflicts have anything in common?

[Lebed] I will say merely what I felt each time as a soldier. Wherever I went, not once did I receive an order in writing. Not once! The telephone would ring, as a rule: Let's go to such-and-such a place, boys, it's not good there, sort it out.... You pull the fighters apart, and as soon as the carnage ends, a crowd of prosecutors piles onto you: Why did you do this, not this? Not one investigator could answer this simple question for me. A soldier is standing there, guarding an object that has been entrusted to him. A passerby spits in the soldier's face. Is this assault and battery or not? And if so, what should the soldier do: shoot the passerby, spit at him in return, hit him? If so, with what: his fist, his boot, the butt of his rifle? For I have to instruct a subordinate when I put him at his post in an extreme situation. The soldier is, in ancien-regime language, a sovereign individual, he is not here on a visit. Civilians may sort things out between themselves—at the level of presidents, politicians, what have you. But leave the soldier alone, he is an official person, his mother is waiting for him at home....

It was a very troubled time in this respect, telephone law raged everywhere. Each time our former president, the incomparable Gorbachev, was "astonished." Thus three divisions were flown to Tbilisi, three divisional commanders, I recall, came together—eight regiments for the three—a whole armada. You can imagine what work this involved: Getting people away from all the airfields, loading the helicopters with equipment, transferring, unloading, deploying, putting the city under protection.... And then this astonishment is expressed at the top: How did they actually come to be there, did the devil put them there? They all pretend to be simpletons....

And how did they devour Rodionov, commander of the district? He was a most intelligent person, an elite general, we do not have many like him in the army. And he was subsequently "appointed" the culprit, and they wrote that he was a murderer.

All this made an extremely negative mark on our minds. You feel yourself to be in some way inferior, as we would put it, perhaps. As though you are in service of the state and you have power to hand, but you are like a butterfly beneath a net—it is about to be slipped over you.

[Khantsevich] Aleksandr Ivanovich, continuing the subject of inventions.... Various things are being said, for example, about your relations with the present minister of defense....

[Lebed] I do not know who is saying what, but it has been the case that we have in our service careers been closely linked our whole lives. Were, that is. Senior Sergeant Lebed was under Lieutenant Grachev deputy platoon commander. Then Lieutenant Lebed was a platoon commander in a company under Senior Lieutenant Grachev. Subsequently we went our separate ways—we met up in

Afghanistan. Lieutenant Colonel Grachev, deputy regimental commander, Captain Lebed, battalion commander. We met up in the airborne forces once again. So we spent a lot of our service life together.

[Khantsevich] One further myth—concerning the start of your service in the Dniester region. That you came here incognito, with papers made out for Colonel Gusev....

[Lebed] This was the case. My assignment included the mission of securing the evacuation of the servicemen's families. And the document was issued for this special assignment.

[Khantsevich] So you came here with one mission, and then the order to take over the army came?

[Lebed] Yes, when I looked into the situation, I realized that there could be no question of any evacuation and that the armed conflict could be and had to be stopped.

[Khantsevich] At that stage you found a common language with the local leaders. During the combat operations, upon their conclusion particularly, you were frequently seen together. And then a sudden parting of the ways....

[Lebed] Practically immediately. I will first show you a document.

I arrived here on 23 June 1992. I became commander on 28 June. On 14 July I received a petition from Senior Justice Counselor Luchik, prosecutor of the Dniester Moldavian Republic, for the apprehension of Reserve Lieutenant Colonel Kostenko. This commander of the Dniester Guard 2d Battalion in Bendery, of sorry renown, was, indeed, a real villain: schizophrenic, alcoholic, drug addict. This is what it says:

Reserve Lieutenant Colonel Kostenko, as commander of the PMR [Dniester Moldavian Republic] Guard 2d Battalion, embarked on the path of serious crimes. As of this time he has unlawfully deprived of life more than 20 persons from the ranks of peaceful inhabitants, PMR guardsmen, and police officers of the Republic of Moldova. Kostenko carried out the executions of the said persons in a state of alcoholic intoxication, as a rule, without any verification, on suspicion or personal dislike alone. In connection with Kostenko's criminal activity criminal proceedings had been instituted in respect to the latter by the PMR Procuracy on 9 April, and a warrant for his arrest had been issued on 24 April. But Kostenko was not opportunely arrested. Considering the above and also the fact that, remaining at liberty, Kostenko could frustrate the negotiating process between the PMR and Moldova, I would ask that you assist in detaining Kostenko and placing him in a cell of the PMR Military Headquarters. For your information: Kostenko is resourceful and dangerous, is constantly surrounded by beefed-up security, enjoys certain support among the activists of Bendery, and could provoke a massacre in Tiraspol itself."

I was already aware of Kostenko's gangsterism by that time. At first I believed that this was no concern of mine: Those who have engendered a criminal, they should be the ones to slay him. But petitioners came from Bendery in streams—help us, defend us, save us.... It talks about his 20 victims here, but in actual fact he killed no fewer than 100.

Having received this petition, therefore, I prepared an operation and put it into effect on 17 July. A special airborne battalion and an armored company assigned to it surrounded the 2d Battalion and completely disarmed it, without losses on either side. Disarmed it handsomely. You need also, after all, to know how to deliver ultimatums. When a 125-mm gun 100 meters away is staring you in the face, there is nowhere to hide—a shell from such a distance will turn the bravest into a heap of pitiable rags hanging from the bushes.

In a word, the battalion was disarmed. But Kostenko himself had been removed from his former whereabouts. He had been spirited away, as we learned subsequently, by people from his personal guard and the security service of PMR President Smirnov. And then they finished him off. And they stuck it on me.

Why did they bump off Kostenko? He knew too much. Aside from the killings, he had, in addition, been involved in robbery on a very large scale. It is sufficient to say that he stopped a KamAZ echelon, which was en route from the Western Group of Forces via Tiraspol, unloaded it, and sold off the motor vehicles. Mass arms dealings, a monopoly on food in hungry Bendery—all this was controlled by Kostenko. And it is not hard to guess why he was disposed of without trial or investigation.

So the disagreements with the local leaders began immediately. And what you have seen has been simple diplomatic courtesy. We meet even now and smile at one another. Not all that sincerely, it is true.

[Khantsevich] That is, the conflict has switched to the phase of open confrontation. Has it?

[Lebed] But on each occasion the initiative does not come from me. There is a mass of examples. An edict of President Smirnov recently declared the entire air space over the Dniester region property of the PMR. The sole proprietor is the Aviation Administration, and within its jurisdiction are the transportation of passengers and freight, services, and, note, "all airfields." But there is just one here, and this is military, Russian at that, what is more.

Further, an edict of that same president of the PMR "inserted" amendments to the status of servicemen of the Russian Army on the territory of the Dniester region. Thus in the event of an agreement being reached on the withdrawal of the 14th Army and also in the event of the disbandment of the units, all the equipment and munitions, as, equally, the rest of the property, shall be declared the property of the PMR. All this is aimed, perhaps, only at the utmost exacerbation of relations with Russia. Only people who are not planning on staying here could behave this way, it being to their advantage to make a mess of things and slip away on the quiet, seeing as there is somewhere to go to....

[Khantsevich] Have there been any actions taken against you personally?

[Lebed] Leaflets have been posted in Tiraspol with the following content: "Alarm! Alert! Lebed, funded by Borovoy (Moscow) and Manukyan (Tiraspol), is preparing bloody terror on the land of the Dniester region. His purpose is the seizure of power, destruction of the armed forces of the PMR, and surrender of the republic to Romania. People of the Dniester region, be vigilant! Lebed is the Judas of the Dniester region!" This lunacy has been circulated in Tiraspol, but entirely opposite information is being tossed Moscow newspapers of a particular persuasion: "According to information received by the newspaper, there has been a very serious change in the situation in the Dniester region. Leaflets calling for the ouster of President Smirnov have been posted throughout Tiraspol. As our informant observed, this has been done on the directions of General Lebed.

Part of the army has been put on a state of alert, and the servicemen are being confined to barracks in body armor."

The very environment of the activity of a number of local leaders has accustomed them to being unable to live without provocations. Some of them are conclusively entangled in corrupt business. No way out, political, at least, is in sight. The international isolation of the Dniester region has not eased but, on the contrary, has intensified as of late. Plus the economic impasse. You are carrying local money? It is a charm, not money. They take a regular postage stamp and stick it on an old Soviet note, and all this is passed off as a brilliant invention of thinking humanity.

So that when everything is going badly, when a mass of malcontents appears, all vile, unprofessional politicians start to operate according to the stereotype—they switch tracks. The search for an enemy—foreign, internal—gets under way. If the foreign enemy does not work, let's have an internal one. It was decided for some reason or other that I would be a suitable candidate for an enemy. But I am no candidate for whipping-boy. All this is short-sighted, and is being done quite clumsily, what is more.

Then stage two—the organization of an armed conflict—begins. For war, as we know, writes off everything.

A special situation was introduced in the Dniester region on 18 January. For what reason—no one can articulately explain. Initially in connection, allegedly, with the elections in Moldova—an exacerbation of the situation is possible, they said, provocations cannot be ruled out.... But the elections were held long since, and in organized fashion, what is more, without conflicts. Politically soberminded people have come to power in Kishinev [Chisinau], a dialogue with them is possible. But the special situation was ultimately extended for a month, then for another....

[Khantsevich] Nonetheless, as long as Russian troops remain in the Dniester region, it may be hoped that things will not reach the point of a new armed clash. But there is information that a decision on the conversion of the 14th Army into a military base of Russia has already been adopted....

[Lebed] All this is much ado about nothing. The president of Russia was in Georgia. There is nowhere currently for the very sovereign Georgians to go, and they have found themselves completely penned in. And so the following agreement was signed: through the end of 1995, a transitional period, and as of 1 January 1996 there will be on the territory of Georgia three Russian bases—army, naval, and air. And by analogy political dreamers began to ponder what might happen in the Dniester region. A base, for certain. And the commotion begins again. There is no such decision.

[Khantsevich] What, then, do you yourself see as the fate of the 14th?

[Lebed] Were I asked whether it were normal for the army of one state to be on the territory of another, I would answer: No, it is not. Should it be withdrawn? Undoubtedly. But when—this is another matter. When the political and economic conditions for its withdrawal have been created.

By political I mean the imparting of an international-legal base to the relations of the left and right banks of the Dniester. Some people must be serious guarantors that there will be no more war here. Meanwhile, whether some people like it or not, a certain military-political balance has taken shape here, albeit somewhat spontaneously. People would simply not let the army leave.

Economic conditions. Thanks to Mr. Shevardnadze, quite enough forces have been withdrawn to Russia. Withdrawn thus: officers, into barracks, barns, and henhouses; tanks, into the open fields.

Only when we have built some things there: apartments, in full measure, barracks, 50 percent at least, then, with the appropriate political background, the army might get under way. There is no technical problem—planning an echelon and transferring it. Although there is one "but" also: munitions. They can neither be dumped nor eliminated in situ—there is too much of them. So they have to be withdrawn in small special quantities. How would Ukraine view this, would it be happy at such dangerous freight crossing its territory? What would it ask for this? If we exclude weekends and holidays from the days on which they are withdrawn, I would not even attempt to say how long it would take. Several years, in short.

And when the Moldovan side continues to insist on the withdrawal of the 14th Army before 1 July 1994, this is not even funny. It is personal ambition pure and simple.

If the Germans, say, want the troops to leave their territory, they render us the utmost help and assistance. Moldova, on the other hand, has yet to provide one ruble to help the Russian military relocate and fend for itself and has only presented ultimatums.

[Khantsevich] Aleksandr Ivanovich, great interest was aroused in military circles, as among the public at large, for that matter, by the book entitled "The Performance Was Called a Putsch," in which you described the events of August 1991. Now, as far as I know, you are working on yet another book. You are not yet, it would seem, of an age to

be sitting down to write your memoirs. What has prompted an active general to take up the pen?

[Lebed] There is, in fact, one book. What you read about the putsch was merely a chapter from the future "Notes of an Army Commander," a provisional title, it is true.

This book is not so much one of reminiscences as a conversation with the reader. I myself have been attempting to understand what kind of country ours isgreat and at the same time unfortunate. When will we start to respect ourselves, when will we bring into line the colossal territory with its enormous wealth and the living standard of the 150 millions persons inhabiting it?

And if just some of the people who read this booklet ask themselves such questions, I will consider it not to have been written in vain.

### **UKRAINE**

### Morozov Attacks Trilateral Agreement 944K0952A Kiev UKRAYINSKA HAZETA

in Ukrainian No 6, 17-30 Mar 94 pp 1, 8

[Article by Colonel-General Kostyantyn Morozov, military commentator of UKRAYINSKA HAZETA: "Taking a Look at the 'Partnership for Peace.' Appeasement By the Betrayal of Partnership. Questions of Security, Nuclear Disarmament, and Relations Between NATO, the U.S., and Ukraine"]

[Text] It seems that, having won the Cold War against communism, the West and its military organization NATO, found themselves not knowing which way to turn. The question arose: What next? No matter how hard the provincial diplomacy of the countries that emerged out of the ruins of the USSR tried to persuade Western politicians of their peace-loving intentions and their desire for democratic change and integration, there was no sign of any significant response from the West. Western politicians listened to them, reassured them, but did not act accordingly. The West was perfectly aware that these countries posed absolutely no threat, that the democratic changes are being implemented by trained politicians (there is a real shortage of them in the provinces), and that there is no particular advantage to development from integration with the hungry.

The West did not envisage (nor did it seek) new formulas for effective cooperation with a whole host of new states. Things were more or less clear as far as the countries of the former Warsaw Pact were concerned. As soon as they emerged from under the influence of communist ideology, they immediately turned towards cooperation with the West, including its military structures.

The countries that formed on the territory of the former USSR merited special attention from the West. The presence of nuclear weapons in Ukraine, Belarus, and Kazakhstan, Ukraine's singular position with respect to her attitude towards nuclear disarmament, Russia's harsh policy of pressure on her former sister states in the Union

directed at creating obstacles on their road to independence—all these 'hings prevented the West, and especially the United States, from formulating a clear plan for building relations with the new states. It is preferable to deal with a single partner—we often heard this undisguised nostalgia for the past. This makes it easier to direct one's own policy and to predict that of the other side. Thus, a new center was needed to replace the USSR. Immediately! It goes without saying that Russia aspired to assume this fole.

The West wanted Russia to be its only partner in solving all the problems that arose with the collapse of the Union. Consequently, the West did not condemn Russia's policies towards some of the CIS members. The West needed this CIS that the rest of us find incomprehensible. It represented for the West that future center in which Russia would be the leader. And this leadership was already discernible in the growing ambitions on the one hand, and the shaping of a policy of relations with the "older brother" on the other.

All that this center lacked was the necessary level to control the emergence of problems of an unnecessary partnership with the countries of Eastern Europe.

In order to involve everyone in a joint effort to achieve this end, at the end of 1991, the West came up with the idea of cooperation with NATO. Almost all the countries seized on this idea. Russia was to be the leader of all those who joined.

A situation was needed that would unite the CIS members more closely around Russia and force the West to reject the inopportune demands of Eastern Europe for close cooperation. There was not enough pressure on the West by the new "center"... And so they began to organize it.

The first voice to be heard was that of Andrey Kozyrev. The Russian foreign minister delivered a speech in Stockholm that shocked all those present. He virtually announced to the world that Russia wanted to return to the Cold War. "Too many liberties should not be taken with 'Great Russia'," stated the diplomat. "The territory of the former Soviet Union... is a space on which Russia has to defend its interests will all available means, including military means!"

The Western delegates were stunned by this sensational speech. And even though Kozyrev explained later that same day that he had been joking, they have been repeating this same "joke" for more than a year now. The old Russian parliament, which passed a resolution on the status of the Ukrainian city of Sevastopol, and the new Duma, which has rehabilitated the State Committee for the State of Emergency and reverted to thoughts of restoring the empire, are "joking" in this very same vein. President Yeltsin, who even earlier had recognized the right of nations to self-determination but not their right to separate from Russia, condemned the parliament in words, but in reality he was "joking" as well. And now, having announced that his foreign policy is based on defending Russians in all the countries of the world, he is "joking" in the Duma. Just a month after the Stockholm

"joke," in January 1994, Kozyrev himself announced that Russia would leave its troops on the territory of neighboring countries: "We should not give up our presence in these regions, which have belonged to Russia's sphere of interest for centuries." Kozyrev was "joking" once again, only more concretely this time, when he advised Western diplomats not to rush to open their embassies in Kiev because they would soon have to downgrade them to consular representations.

Jokes are fine, and therefore after some of the explanations that follow, everything seems to fall into place, but policy is being shaped. In shaping it, Russia increasingly treats other countries in a joking manner. That is what Russian President Boris Yeltsin did when he gave his "O.K" for the entry of Poland and her Visegrad colleagues (the Czech Republic, Slovakia, and Hungary) into NATO. This time, it was the generals from the Ministry of Foreign Affairs and the Ministry of Defense who unanimously made excuses in Moscow for the president's joke in Warsaw. "Expanding NATO membership threatens the security of Russia"—such is Russia's current policy on this issue. Unsurprisingly, it did not incur any resistance from the West, because the West was waiting for it, and Eastern Europe understood this.

The West now has to formulate a new policy. It should be perceived not as a new policy, but as a continuation of earlier policy which has already been accepted—that is, within the framework of military and political cooperation.

The North Atlantic Council on Cooperation [NACC] lasted a little over two years. It was created on an American initiative by a decision by the NATO Council on 8 November 1991 and announced as the Rome Declaration on Peace and Cooperation. The declaration established new relations with the countries of Central and Eastern Europe. Instead of opposition—the goal was consultations and cooperation aimed at strengthening the initiatives of the Conference on Security and Cooperation in Europe.

This initiative for cooperation was immediately accepted by all the states of the former Warsaw Pact, including the states of the former USSR. Two conferences of defense ministers of NATO countries with their partners in cooperation within the framework of the NACC were held in Brussels (1 April 1992 and 31 March 1993). The first meeting of the session of the military commission on cooperation was held on 10 April 1992. At this meeting, the chiefs of the general staffs, representing the same parties as those taking part in the conference of defense ministers, planned cooperation among the partners for the coming year.

I visited Brussels at the end of February. This time, meeting with political and military representatives, including NATO representatives, as well as during my visit to NATO headquarters, I received no answer to my question regarding what new mechanisms of cooperation have been established by the "Partnership for Peace" program that had not been offered by the NACC initiative. Why was there a need for a new initiative, and what is the

purpose of persuading us that the new program opens up wide opportunities for cooperation?

There are no answers. There are only strenuous appeals to embrace the program as a new wise step by President Clinton, his Administration, and NATO towards peace in Europe.

What is this program in reality? Countries have been given the opportunity to decide for themselves how close they wish their relations with NATO to be in the future. This is to be done by submitting formal requests which will serve as the basis on which draft agreements between NATO and the partner countries will be jointly prepared. The framework document grants all who sign it the same rights as those already established for them by other documents, which Ukraine and all the other future partners have already joined. In particular, the new document sets forth the general commitment "to voluntarily abide by the provisions of the UN Charter and the principles of the Declaration on Human Rights." It also contains valuable clauses that hint at security guarantees for our state: 'especially to refrain [emphasis mine—K.M.] from the use of force or the threat of force against the territorial integrity and political sovereignty of any state, to respect existing borders..." And more specifically: "...fulfilling the obligations that they assumed in the field of disarmament..."

This is followed by a statement of the goal of the partnership, which, in my opinion, had already been made in the earlier principles of cooperation contained within the framework of the NACC, and which do not commit anyone to anything.

As to new provisions, it unlikely that Ukraine will take advantage of them in the near future. Because our country has no money to maintain a "liason office" at the Brussels headquarters or to maintain there "personnel, property, and equipment," and no aid for this is anticipated.

The key principle is set forth as follows: "NATO will consult [emphasis mine—M.K.] with any active member of the partnership, if this partner perceives a direct threat to its territorial integrity, political independence, or security." That is all. Nothing more.

What is the strategic premise of the new program?

One can arrive at the answer on one's own by simply reflecting on one thesis that failed to attract sufficient attention from analysts and the press. Responding to a question from journalists regarding the objective of the "Partnership for Peace" program at a press conference in Brussels on 9 January of this year, U.S. President Bill Clinton said that the partnership "...will give us the best means by which to respond should the future be threatened." In other words, the goal is not to strengthen trust between the countries of Europe by expanding NATO membership through greater cooperation with the partners within the framework of the NACC, but to respond to crises with existing forces and political means. As regards the partnership, it applies to the more powerful, as does peace among them.

It is not difficult to see that what we have here is the same division of "spheres of influence," in which there is no room for cooperation on an equal footing for the partners. There is a strategic objective, and strategy requires strategic partners. The partnership for peace is meant for the powerful, and the powerful know well enough whom and how they should allow or invite to cooperate with them as their "partners."

The partners have been divided in the same way as territories. Nonnuclear Ukraine with her hopeless economy and undefined policy is clearly to be left to her old "master," who, by restoring ties (the disruption of which, incidentally, is being lamented in Ukraine for three years now), will provide us with work and sausage and will defend us from those he deems necessary.

It is difficult to cooperate with those who have not taken a clear stand, because it is difficult to predict their policies, and for that reason (at least for now) there is no reason to trust them. Because trust means concrete assistance in exchange for something in the future. And this future (be it socialist or social-market oriented) cannot be discerned, at any rate in Ukraine. That is why self-reliance is another goal of this compromise program. On 10 February 1994, The Washington Times published an article entitled "Talbott foresees no change in focus," in which it quotes the deputy secretary of state: "If... reform in the East falters, if a new threat arises, NATO will be able to work through the partnership to protect regional stability through closer ties with the active participants."

But since it is clear even now that reforms are faltering (in Russia, of course, because this has nothing to do with Ukraine whatsoever), a partnership is possible only between the centers. The second center (other than the U.S.) was traditionally the USSR. Now Russia is ambitiously pushing to take its place, and, appearing it, the West supports this.

Nothing reflects a country's political intentions better than its budget. On 7 February 1994, the Clinton Administration published details about appropriations for its new policy on foreign aid...

The Administration will refrain from allocating budget funds to specific countries. But the review materials of the U.S. Congress note that an exception is made in the case of Israel, Egypt, and... Russia.

The apartments of Ukraine's citizens have not grown any warmer as a result of our nuclear weapons having been pawned for energy supplies from Russia, but where is that promised multimillion (to start with, then to be followed by multibillion) aid that we were to receive from the West?

There are plans to allot 2.8 billion dollars from the U.S. budget for "building democracy." Of this sum, the former Soviet republics (which, insultingly, also include Ukraine) are to receive 900 million dollars, which is approximately half the sum allocated last year. This reduction is especially interesting in light of the recent announcements made by the American administration to the press that it is "doubling" assistance to Ukraine to 300 million dollars,

which amounts to nearly 12 percent of the current 2.8 million [as published]. If this percentage does not change substantially, Ukrainian democracy in 1995 will receive "all of 100 million dollars in aid." Aid to Central and Eastern Europe is also being reduced.

The American negotiators who recently succeeded in persuading the president of Ukraine of the necessity to deprive Ukraine of her nuclear weapons were inspired by a secret assessment by U.S. intelligence that Ukraine will most probably not survive the next two years as a fully sovereign state. The Ukrainian people hoped in vain that they could hold on to their nuclear weapons until they received substantial economic aid and adequate security guarantees.

The declaration promising the surrender of weapons without assistance and guarantees was signed by the president of Ukraine on 14 January of this year, and by 8 February, our foreign minister signed in Brussels and thereby espoused the "Partnership for Peace" program, which rids Ukrainians of other illusions as well.

Thus, Ukraine will be provided with economic assistance and security guarantees by Russia at Russia's own discretion. We have thus come full circle. It would be interesting to know what prognoses and conclusions Ukraine's own intelligence service is arriving at.

The partners have been betrayed, appearement continues, but will there be peace?

The position of the West is understandable, but who will understand us?

I am astonished by the position of our president, who was unable to achieve the objective in the negotiations which we had posed from the very beginning. Now they "report" to us that our missiles are allegedly in a dangerous condition and that we have no more time. But just two weeks before the Moscow summit, Defense Minister Radetskyy assured the citizens of Ukraine in a television appearance that the opposite was true. In other words, there was time

Ukraine's journey to specifically trilateral talks was a difficult one-more than a year was spent persuading us that only with the participation of a third party, and specifically the U.S., could we be confident that the fulfillment of obligations assumed by the parties would be monitored. In my opinion, all three parties to the agreement should have assumed obligations. Ukraine reduces her nuclear weapons and, if it proves impossible to organize their conversion on her own territory (the Supreme Council adopts a decision following a review of government programs), she hands the weapons over to plants in Russia. Russia compensates Ukraine for the value of the materials in the nuclear weapons, including tactical weapons, and guarantees Ukraine's security for her part (commits herself to eliminate pressure, blackmail, threats of force, and territorial claims from her policy towards Ukraine). The U.S. promises to monitor the fulfillment by the parties of their obligations and, by its own policy of

relations with Ukraine and relations with Russia, to promote political relations between Ukraine and Russia founded on principles of justice and security.

The obligations assumed by the parties should be ratified by their respective legislative bodies and be subject to verification by an international commission created by all three parties. Were this the approach, we in Ukraine would not feel that we are again being stripped naked and that an attempt is being made to cheat us. These would be those external political guarantees, which together with internal political, economic, and social guarantees, would guarantee our security. This was something that we (at least I) stated many times at various talks: "That is how we in Ukraine envisage the guarantees that we are talking about." I do not know whether the president and Foreign Minister Zlenko envisage these guarantees in the same way. It was Zlenko's job to reach the same conclusions. prepare the data on which the president could form his position, and plan the negotiations. I know many more intelligent people who work in the Ministry of Foreign Affairs, but apparently the minister himself abides strictly by the principle "it is easier this way."

Or, perhaps, we have no one at all whom we can entrust with affairs of state, no one on whom the president can rely.

One is seized with sadness upon reaching this conclusion. Is our own policy being conducted outside the context of world politics? How many concessions have already been made, and how many more are being planned... These are the very things that are reducing Ukraine to a second-rate position in world politics. These include, first and foremost, hindering the building of our Armed Forces and the system that will assure their security, which, coupled with "invisible borders," makes it impossible to lay the foundation for our own security and our own military policy—a situation that puts in question the independence of our state policy and, therefore, Ukraine's very statehood. In another sphere—putting off the implementation of the principles of a social-market economy helps to maintain the catastrophic situation in production, and, along with growing crime, heightens social tensions among the people, who are being incited in an increasingly organized manner to demand brotherly ties with our neighbor. Finally, the lack of state programs for supporting and reviving national culture, science, health, and sport are destroying all hope of things improving in the future. But hope dies last.

The people of Ukraine are holding elections specifically for the purpose of getting a new parliament, which will work in the interests of the state, of getting a new government, capable of finally beginning economic reforms, rather than confining itself to market phraseology, while continuing to work in a command-administrative system. The people are hoping that at least their children and grandchildren will have a normal life.

We are for partnership and, unquestionably, also for peace. But not for a partnership, in which there will be peace only between the centers, peace attained through the division of spheres of influence. We do not want to become part of an empire for the sake of peace only between the West and the empire. We want peace in our own land as well, peace in our own home. We want our own partnership with others and not through intermediaries. And we will have it. If we become a state.

### Footnote

1. Based on data provided by the Pylyp Orlyk Institute of Democracy (11 February 1994).

Radetskyy Comments on Officers' Groups
94UM0309 Kiev NARODNA ARMIYA in Ukrainian
23 Mar 94 pp 1, 3

[Interview with Minister of Defense of Ukraine General of the Army of Ukraine Vitaliy Radetskyy: "The Commander Will Always Have Sole Ultimate Authority"]

[Text] Minister of Defense of Ukraine General of the Army of Ukraine Vitaliy Radetskyy comments at the request of NARODNA ARMIYA on some articles of the statute "Assemblies of Officers in the Armed Forces of Ukraine"

[NARODNA ARMIYA] Comrade Minister of Defense, social-democratic principles, as reflected in various active forums, are being made inherent in the process of the intensive building of the armed forces of Ukraine at the same time as the resolution of purely defensive and military issues today. One of these is the Assemblies of Officers. Concrete confirmation of this is the statute "Assemblies of Officers in the Armed Forces of Ukraine" that was recently published in the press.

This document has struck a chord throughout army society. The officers, in their letters and in telephone conversations, are noting the overall positive substance of the statute, and support the democratic movements that have been projected in the army. People are at the same time expressing some doubts with regard to the achievement of positive results in realizing the principle of sole ultimate command authority. What are those doubts founded on? The thought is being expressed that the role and place of the commander is barely discerned in the statute. He is seemingly effectively denied the authority of the sole commander, since he is forced to carry out the decisions made by the Assemblies of Officers of the military units. I would like to get a sense from you of how warranted their concerns are, and is there a certain measure of truth in these conclusions?

[V. Radetskyy] I would like to emphasize right from the start that the Assemblies of Officers in the armed forces of Ukraine are not the fruit of spontaneous activity by the servicemen. They are based on solid legal foundations in accordance with the Law "Social and Legal Protections for Servicemen and the Members of Their Families" and the Law "Associations of Citizens," and are a social organization. This was also confirmed by the Statute "Assemblies of Officers in the Armed Forces of Ukraine" itself. Their independent status was codified in Article 8 of the Law "Associations of Citizens," where it is written that "Interference by state bodies and officials in the activity of associations of citizens as such, as well as the interference

of associations of citizens in the activity of state bodies, officials or in the activity of other associations, is not permitted aside from the cases stipulated by the Law."

This in no way signifies, however, that officers who have associated in a social organization can ignore the decisions of a commander with sole authority. The directives of the commander are mandatory for each serviceman of a unit or institution. Sole authority is the core in the building of the armed forces of Ukraine. It is made incarnated in Article 3 of the Law "The Armed Forces of Ukraine," which says "The Armed Forces of Ukraine are structured and carry out their activity on the basis of... sole authority and collegial decision making."

I would point out at the same time, without any claim to being the ultimate authority, that I understand the apprehensions of the officers. They are perhaps correct in some elements. Contradictory clauses are encountered in the statute. The role of the commanders really cannot be discerned in the operating mechanism of the assemblies. That in no way signifies, however, that the significance of sole authority in the army is not reflected in the document. It is written at the very beginning that the Assemblies of Officers "are called upon to promote the strengthening of sole authority in every way."

This highly important principle in the building of the army, true, is not mentioned again in the text, and the organizational role of the commander is not clearly defined. But let us, so to speak, look to the heart of it and think: What do the Assemblies of Officers exist for? What is realized in their activity? The answer is found right there: "The principles of democratism and glasnost under army (or navy) conditions are realized in their activity." Democratic principles are developed on this foundation as well.

But let us now move away from this idea and think some, as it were, about the reverse. Imagine that the leading role of the commander figured throughout the statute. What would happen then? Under regulations he is the sole commander in the unit, and it is written in the statute that his duties must promote the work of the Assemblies of Officers. Then there would be no need to talk about any shoots of democratism in the army. Later, obviously, would come opinions from the troops on the usurpation of authority by the commanders, if they subordinated the social institutions to themselves as well.

[NARODNA ARMIYA] The Statute "Assemblies of Officers in the Armed Forces of Ukraine" obligates the commanders of military units to treat the ideas of the Assemblies of officers with respect, and to take active part in the realization of decisions made.

The question arises of just what decisions of the Assemblies of Officers could be brought to life by the unit commander? Take, for example, such a delicate question as the promotion of an officer. Try and imagine this situation. Say a commander, before putting a subordinate up for promotion, decides to discuss the candidate for promotion at the Assemblies of Officers. But they do not reach a mutual understanding. What can be done in such a

situation? Polar opposite points of view, after all, could degenerate into conflict if each side insists on its own to the bitter end. But if the commander yields to the Assemblies of Officers, doesn't that undermine his authority as the sole commander?

[V. Radetskyy] An abnormal situation would result, certainly. I think that the commander should display the maximum objectivity, tact and restraint here. In what way? He must approach the evaluation of the officer's capabilities in considered fashion, consult with his closest assistants and deputies, thoroughly discuss the issue again and again at the Assemblies of Officers, hear out with interest the points of view of his opponents, and make the final decision. In the end result, after all, the last word remains with the commander in the resolution of difficult personnel issues. Why? Because he is the commander with sole ultimate authority! That is on the one hand.

On the other, as you have correctly pointed out, is the commander not harmed by his resolution of the matter, is his authority not undermined thereby among the officers of the unit? I will state unequivocably that any confrontation, whatever form it may take, can never lead to any good. What could be counseled here? In my opinion, a compromise approach can always be found. Invite a prestigious commission to the unit, say, from the higher headquarters and reach a final conclusion at the Assemblies of Officers by weighing all of the "pros" and "cons."

That approach would obviously be the sole correct one, insofar as it would help to calm passions and return people to considered positions, to calm and thoughtful common work. And even in a case where each side is left with its own opinion, the final conclusion of a third party (in this case a commission from higher headquarters) would convince the officers of the unit of the objective and honest approach to the specific causes. I feel that no harm will be done to the concept of sole authority, even if the commander is not able to hold his position. More likely the reverse—the conviction of the lofty decency and honesty of their leader will be strengthened in their consciousness. His authority could only gain from that.

[NARODNA ARMIYA] In the great set of problems that is contained in this important document, a particular point is relegated to the section on the duties and rights of the chairman of the Assemblies of Officers. His range of authority is quite broad. The chairman supervises the work of the Assemblies, fosters their activity for the education of officers in the spirit of loyalty to the people of Ukraine, receives members of the Assemblies of Officers and the members of their families on certain questions, establishes and systematically maintains mutual relations with the standing certification commissions and the local authorities...

You read these duties and the idea involuntarily comes to you, is he not standing in for the commander of the unit thereby? The more so as not a word is mentioned in the section about to whom the chairmen of the Assemblies of Officers are subordinate, who coordinates its work. Can he not act independently, without coordinating these issues

and his activity as a whole with the commander of the military unit? Is it not creating an official position that sets a kind of precedent for dual authority in the regiment, which could have a negative impact on matters?

[NARODNA ARMIYA] There can be no discussion of any such dual authority! Let us return to the law and to the Temporary Statutes of the Armed Forces that were approved by edict of the President of Ukraine. The second section of the "General Obligations of Commanders and Other Superior Officers" states directly that the commander (superior officer) has sole ultimate authority and answers individually to the state for the constant combat and mobilization readiness of the military unit, vessel or subunit entrusted to him.

I feel that every chairman of the Assemblies of Officers has to have an excellent familiarity with the situation and the role and place of the unit commander, and foster in every way possible a strengthening of his sole authority. The chairman is also directed toward this by the Statute "Assemblies of Officers in the Armed Forces of Ukraine" that I have approved. And, I think, will there really be found such a chairman of the Assemblies of Officers who would try to replace the commander by his actions, and take his authority for himself? That is absolute nonsense!

I will say more. It should not be forgotten that the Assemblies of Officers are social structures in the armed forces. They are eloquent testimony to the development of democracy both in society as a whole, and in the army in particular. They are at the same time not authorized, however, to replace officials and assume administrative functions. This was and remains the prerogative of the commander with sole ultimate authority.

[NARODNA ARMIYA] And nonetheless, comrade Minister of Defense, you would perhaps agree that there are susceptible places in that document, sort of disjunctures, that pertain to issues of ultimate authority. What do I have in mind? One of the clauses proclaims that the general Assemblies of the Officers Corps "hear out any officer of a military unit, regardless of the position he occupies or of military rank, who is a member of those Assemblies." Imagine a picture where the regimental commander is getting a dressing down for omissions in his work... Would such an action against him be legitimate? Only a superior officer, after all, can reprimand or punish him.

[V. Radetskyy] Certainly only superior officers can demand and declare penalties against a unit commander for omissions in his work. However... let us look at the problem a little more broadly. What is there to condemn or that is prejudiced in the fact that a commander account for his service activity before the entire officer corps of the regiment, publicly relate the tasks that face the unit, the difficulties in solving them, the fulfillment of assigned duties? I think the officers must in that case understand the commander correctly, and will be able to make decisions that will be directed toward improving the state of affairs in the unit and strengthening the authority of the superior officer. In my opinion, it is now time for us to cultivate a qualitatively new, democratic climate in the army and find

mutually acceptable solutions that do not undermine the foundations of sole ultimate authority.

We have of course considered one possible element that could arise at the officers' assemblies. Whatever situation may arise, however, the commander always has to be on top, conduct a dialogue with people in a constructive spirit, in principled and honest fashion. Only in that case will he always be understood and supported.

And one more thing—the commander accounts for his official activity only to a higher commander, and he has been given the right to evaluate the activity of a subordinate.

[NARODNA ARMIYA] At the same time, taking into account that in accordance with the Statute acceptance into the Assemblies of Officers is on a voluntary basis, is it not possible, in your opinion, for the unit commander not to be in that social organization by his own desire, and thereby avoid having to answer and account to his collective?

[V. Radetskyy] That is ruled out. Even assuming such a situation as an example, however, the commander would scarcely gain from it. On the other hand, how comfortable is it from a moral and ethical point of view to "duck" the public, if the collective at its functions is discussing the everyday problems of military training, social and legal issues, discipline and order in the unit? He of course has to be with the collective.

There is another important detail that cannot be forgotten. The Assemblies of Officers in the military units, in accordance with the Statute "Assemblies of Officers in the Armed Forces of Ukraine," are created by order of the commander or superior officer. This fact testifies convincingly that the commander was and remains the sole ultimate authority.

[NARODNA ARMIYA] The participation of the commander in a discussion of sore subjects is certainly vitally necessary. And, on the other hand, giving a member of the Assemblies the right to "express his opinion and criticize any member of the Assemblies of Officers for shortcomings and omissions in service and in personal behavior" could lead in practice to criticism of the commander's orders, which is clearly not in conformity with the principle of sole ultimate authority.

[V. Radetskyy] I agree. A situation could also arise where some officer wants to accuse the sole commander of illegitimate acts or an insufficiently thought-out order. But let us look to the heart of it.

According to the statute, a subordinate is obligated first and foremost to fulfill an order, report that fulfillment and only then can appeal the legitimacy of the actions of his commander. And if the officers raise such a question at their assemblies, then they must act in accordance with the laws and statutes. The main thing is that people not be left with any impressions of a prejudiced attitude toward him. Pressing issues can be cleared up, while the officer does not feel that he has suffered innocently. That is something for the assemblies to work on.

As directly concerns the question of sole ultimate authority, I will say unequivocably that sole ultimate authority is one of the most important principles in the building of the armed forces of Ukraine, and no one is permitted to cast doubt on its role and significance in the life of our army.

# Strategic Arms Administrator on Path to Nuclear Disarmament

94UM0271 Kiev NARODNA ARMIYA in Ukrainian 23 Feb 94 p 1

[Article by MO [Ministry of Defense] of Ukraine Center for Administrative Control of Strategic Nuclear Forces Deputy Chief Colonel Volodymyr Tertychnyy under the rubric "Viewpoint of a Specialist": "Step by Step to Non-Nuclear Status"]

[Text] The ideas of national independence and security are conceptually interconnected, and much in them is reduced to two factors: The possession of nuclear potential and adherence to a strategy of deterrence, with the aim of providing for the defense and inviolability of the territory of the country and full independence with regard to the utilization of nuclear weapons.

What situation has taken shape in Ukraine today?

While coming into possession of nuclear weapons inherited from the former USSR by virtue of historical circumstances, Ukraine cannot be considered a nuclear power, since only a nation that is able to manufacture, test and employ nuclear weapons may be considered such.

Ukraine has great scientific and technical potential, but there are no technologies or any industrial capacity for production in Ukraine, there is no test range for the performance of testing, there are no technical capabilities for the utilization of these arms. It follows from this that Ukraine in fact possess nuclear weapons not as weapons but as goods, as the material assets contained in them.

The approach toward the problem of the nuclear weapons that are stationed in Ukraine is fundamentally altered with a regard for that fact.

The discussion here is not about the possibility of the employment or non-employment of the nuclear weapons on the territory of Ukraine. The problem that moves to the forefront in this situation is how Ukraine can most advantageously sell those material assets, and to whom.

The question of "to whom?" can be considered resolved, insofar as it is unequivocally understood that only Russia, the country where those weapons were manufactured, could be that country. Why? What if some combat engineer tries to disarm a mine that was manufactured in another country without having the corresponding documentation, equipment and training? The same goes for the nuclear weapons that were manufactured in Russia; no other country can disarm them.

Moreover, Ukraine has signed an agreement on the mutual assurance of the preservation of international secrecy. The

transfer of nuclear weapons that were manufactured in Russia to another country would thus be a violation of that agreement.

Now the question arises of "for how much?" The price will depend on the state in which those nuclear weapons reach the plant for dismantling and subsequent recovery. And the state of a nuclear weapon depends on how that item is operated, whether it was serviced in a timely manner in accordance with the technical operating documentation, whether the guaranteed service lives of the constituent items have passed and whether they were replaced in a timely manner etc. All of this is taken into account in the mutual transactions.

Since the time of proclamation of the independence of Ukraine, when all of the property on its territory (including the nuclear weapons) became the property of the independent nation, a period of particular attention toward the state of those weapons started as well. Russia, in fact, stopped servicing nuclear weapons in Ukraine at that time, and the later maintenance of their safe status was accomplished in practice through the spare parts that remained in the servicing subunits.

Meanwhile, starting in 1992, Ukrainian politicians, diplomats and military figures have been trying to reach a series of agreements with Russia with regard to assistance in servicing the nuclear-missile weaponry and maintaining it in a safe state, and the political decision of their further existence in Ukraine has not yet been resolved.

But Russia, referring to the terms of the Nuclear Non-Proliferation Treaty that ban nuclear powers from transferring any technology or equipment whatsoever to other states, have refused to provide such assistance. Ukraine has been left by itself to face all of the problems connected with the nuclear arms left on its territory.

The purely technical problems are also aggravated by the fact that the official status of the nuclear-missile forces on the territory of Ukraine has not been clarified over these two years. It was felt, from the tacit agreement of both nations, that Russia would exercise operational control over those forces, which envisages that the Main Command of the RVSN [Strategic Missile Forces] of the RF supervises all processes of operational and combat training, as well as combat duty, while Ukraine exercises administrative control, that is, assumes all of the expenditures connected with the upkeep of those forces and the coordination of military operations with the local authorities.

The paradox in this situation consists of the fact that Ukraine, while maintaining what it cannot use, has assumed responsibility for the maintenance of nuclear and ecological safety for these weapons that it cannot independently service or use.

Such a situation naturally could not continue for long, since the people who are working on those weapons have been given a great responsibility. The military informed both the president and the government of the country unequivocably of the real state of the nuclear-missile

weaponry in Ukraine, and measures that could be taken to get out of the situation that had taken shape.

Thus, negotiations on the problems of nuclear weapons in Ukraine finally reached a dead end on 1 January 1994, and an appropriate political decision was the only possible way out of it.

Such a political decision was indeed reached on January 14 of this year in Moscow at the meeting of the presidents of Ukraine, Russia and the United States.

The specialists who prepared the materials for that meeting took into account the actual state of nuclear weapons, the problems in servicing them, the acute need of the AESs [nuclear electric-power plants] in Ukraine for nuclear fuel, the large debt of Ukraine to Russia for power carriers, and many other factors that affect the political and economic state of the nation.

But this was only a political solution, figuratively speaking; the gate that the presidents of the three states opened in the tunnel through a mountain of problems. The mechanism itself for the implementation of this decision, the mechanism that would pull the cart of problems through that tunnel, must be produced as quickly as possible. And that is none other than the devising and signing of bilateral or trilateral agreements, contracts and other documents at the appropriate level that would stipulate the conditions for the practical realization of the decisions reached. It cannot be ruled out that some of them will require ratification by the Supreme Soviet of Ukraine. It is understandable, however, that the need to institute the gradual cutback of nuclear arms has become acute, since their maintenance will cost Ukraine much more in the future.

Voices are often heard saying, "Well then, if we are unable to dismantle these warheads ourselves, let's take out their contents and sell that uranium on the international market." First of all, as has already been indicated, Ukraine does not have the technical capability for that, and, second, they would not let Ukraine into that market, because it is already full of that product and because the United States essentially holds sway there. The fact that they have let Russia into it, giving it the opportunity to sell a portion of the uranium that was obtained from nuclear warheads, including those withdrawn from Ukraine with subsequent compensation for Ukraine out of a portion of the profits, is advantageous to Ukraine and could be agreed to.

What does Ukraine gain in losing nuclear weapons, and what does it lose?

Nuclear weapons and a strategy of nuclear deterrence are able to guarantee security and a substantial role for Ukraine in the military-strategic sphere. That, however, is provided that Ukraine really is a nuclear power. And even though the presence of nuclear weapons, even in such a state, on the territory of Ukraine could be a certain element of deterrence, with time it could happen that these weapons are more of a threat to Ukraine itself than anyone else, and the urgent question would arise of how to get rid of them. That would cost a great deal more for the reasons

cited above. The positive consists of the fact that having taken the direction of non-nuclear status, Ukraine would consistently, step by step, be adhering to it, and would remain true to the obligations of the gradual cutback of nuclear arms that it assumed.

#### Nuclear Weapons Control Head on Disarmament Progress

94UM0310B Kiev NARODNA ARMIYA in Ukrainian 23 Mar 94 p 1

[Interview with Lieutenant-General Oleksiy Kryzhko by Senior Lieutenant Serhiy Zhurets: "Nuclear Disarmament Has Already Started, But It Unfortunately Will Not Get By Without Flies in the Ointment"]

[Text] A minimum of 200 nuclear warheads from strategic missiles will be shipped from the territory of Ukraine to Russian reprocessing plants over ten months of this year. That is the amount stipulated by the trilateral declaration signed by the presidents of Ukraine, the United States and Russia in Moscow.

After the dispatch of the first sixty weapons from the strategic missiles located in Ukraine to Russia, however, the leadership of the MO [Ministry of Defense] of Ukraine had to clarify and alter the schedules already approved for the later transport of the nuclear ordnance. Why was this done, and will it have any consequences? Our correspondent posed those questions to the chief of the Center for Administrative Munagement of the Strategic Forces of the Ministry of Defense of Ukraine, Lieutenant-General Oleksiy Kryzhko.

- [O. Kryzhko] The process of withdrawing the ordnance is a very crucial matter; both for the state and for the people. And it has to be done under certain conditions that ensure nuclear security, chief among which is confidentiality. These issues, with references to well-informed sources in the Ministry of Defense of the Russian Federation, are unfortunately being covered in great detail in the pages of the press both here and in the Russian Federation, as well as on television, right down to indicating the timetables and destinations, if there are warheads and how many, and what routes will be taken. This in no way conforms to the conditions under which this process has to take place. I believe that it is enough for the broad public to know that the process of the removal of nuclear weapons from Ukraine has begun on a nationwide scale.
- [S. Zhurets] Is this circumspection connected with the possibility of the threat of terrorist acts?
- [O. Kryzhko] It is connected with literally everything. I do not have in mind here only the threat of terrorism. This is a question of the normal process of ensuring nuclear security. It is necessary, after all, to prepare a railroad with all of its services, guarantee the fulfillment of measures pertaining to ensuring nuclear security, and prepare our combat services with the support personnel, the bases from which the warheads are sent, and the bases that are receiving them. It is a very broad circle of issues, in the resolution of which chance cannot be tolerated.

[S. Zhurets] Recent statements by the press service of the Ministry of Defense of Ukraine on this score are saying that certain forces in Russia have a vested interest in slowing down, or even breaking off, the planned withdrawal of nuclear weapons from Ukraine, so as ultimately to accuse Ukraine of slowing down the process of nuclear disarmament. I would like to know your point of view.

[O. Kryzhko] That is the first time I have encountered that interpretation. I have constantly felt pressure on the part of the Russian Federation, for the last year and a half, that Ukraine begin the withdrawal of nuclear weapons from its territory as quickly as possible. We saw the same strivings in the negotiations on the nuclear problem with specialists from Russia. And today, at the level of the technical fulfillment of the decisions that have been made, we all feel the same striving toward accelerating, and not slowing down, the process of withdrawal of nuclear warheads from Ukraine.

[S. Zhurets] Nonetheless, Ukraine is now forced to specify the routes and schedules for transporting the nuclear combat units. Doesn't that specification of the schedules affect Ukraine's fulfillment of its obligations with regard to deadlines?

[O. Kryzhko] No, it in no way affects it. Ukraine is fulfilling the obligations it has assumed.

[S. Zhurets] Does the 43rd Army have sufficient capabilities with regard to manpower and equipment so that the process of deactivating the strategic missiles and withdrawing the nuclear warheads to Russia can take place without any deviations and tensions?

[O. Kryzhko] As for the technical aspect, we have everything necessary, with the exception of a sufficient quantity of power resources—fuels and electric power. We have lately begun to receive fuel from the Americans; true, a rather small amount, in accordance with agreements and signed treaties—several tonnes of gasoline and diesel fuel. They are promising to supply us with an additional quantity of fuel at the end of March. We are seeking out every opportunity to fulfill our obligations as stipulated in the trilateral declaration. So that we do not look to all the world as people who say one thing and do another.

[S. Zhurets] Thank you for the interview.

## Scientific Support to Armed Forces Needed

94UM0310A Kiev NARODNA ARMIYA in Ukrainian 23 Mar 94 p 2

[Interview with Kiev Air Forces Institute Science Center Chief Colonel Oleksandr Vasylovych Safronov by Lieutenant-Colonel Oleh Vachayev under the rubric "Building the Armed Forces of Ukraine: Experience, Problems, Prospects": "Science Must Work for the Needs of the Troops"]

[Text] The process of creating scientific centers at leading military educational institutions began in the middle of 1992, in accordance with a decree of the Cabinet of Ministers of Ukraine and promulgated by the corresponding order of the Ministry of Defense of Ukraine. One such center has

begun operating at the Kiev Air Forces Institute. A correspondent from NARODNA ARMIYA asked the chief of the NTs [scientific center], Doctor of Sciences Professor Colonel Oleksandr Safronov, about the general problems and tasks facing the scientists during the period of organizing the center.

[Vachayev] Oleksandr Vasylovych, it is evident that Ukraine has been left with quite a bit of scientific potential inherited from the former Union, which used to operate in particular as scientific and technical support in the interests of the Air Forces. Is the creation of the scientific center an attempt to somehow combine those forces?

[Safronov] I will begin with some figures. Whereas there were 175 doctors of sciences and 2,700 candidates of sciences working on the needs of the Air Forces in the former USSR, only 20 percent are left in Ukraine. There is one "but", however. The overwhelming majority of them are not in scientific structures, but are rather at educational institutions. There are thus many reasons, to which we will return later.

I will say for now that the tasks of building our own armed forces of Ukraine suggest that higher-educational science, as we call it, by itself is not enough to resolve the whole volume of problems.

Take again, by way of example, our recent history. The scientific and technical support for the Air Forces at the stages of creating scientific work in progress, development and design engineering, and the refinement of aviation hardware, for example, used to be conducted by a large number of sector institutes. The institutions themselves, aside from the design bureaus, carried out the entire development of certain programs and the comprehensive evaluation of the hardware that was being developed. There was, that is to say, a well-defined structure operating at all stages of the creation of the complex aviation hardware, stages requiring great intellectual and experimental work. It is too difficult to make anything new without the enlistment and establishment of those structures. I would like very much to see that that is understood in Ukraine as well.

[Vachayev] As far as I understand it, the scientific center is taking on a portion of those tasks...

[Safronov] If we are speaking in general, the basic aim of our activity is to perform the function of scientificresearch institutions for the branches of the armed forces, namely to support basic exploratory and applied research in the interests of a branch of the armed forces, in this case the Air Forces.

We are trying to encompass the whole spectrum of scientific tasks, starting from the process of creating the scientific work in progress. But I want to point out that we are not able to do it all. Be that as it may, we are obligated to move toward the creation of the sector NDIs [scientific-research institutes] I was already talking about. The point is that our base, having in mind here the Air Forces Institute, is rich, but it does not permit us to monitor experimentally the work that is being performed, for

example, by the general contractors. We are still working our way out of that situation, working with the corresponding institutions of the Academy of Sciences of Ukraine. But we cannot do everything.

[Vachayev] I would ask another question—you are trying to work in the interests of a branch of the armed forces, taking on more than 50 areas of scientific activity, for example, and such a highly difficult question as the scientific substantiation of training for flight and engineering and technical personnel. But the center exists at an institute, albeit a lead one, that is subordinate to the Main Directorate of Military Education.

[Safronov] The creation of scientific centers at military educational institutions is a justified and, I would say, forced measure from all points of view. But you cannot launch such a structure out of nothing. The scientific potential of the center, on the other hand, is not taken into account in the accreditation of the higher educational institution, and its scholars are seemingly separated from the educational process. This forces the supervisors of the educational establishment to hold back in staffing the center with scientific personnel, especially those with higher qualifications. But none of the workers at the NTs refuse to work with graduate students or conduct diploma projects. There is not always the time to lecture, it is true, although we do not rule it out in the future.

Contradictions arise therein that are still not giving us the opportunity of hiring highly qualified specialists at the institute. But we were expecting that, and we have thus been trying from the start to enlist the most highly civilized scholars, both from among those who are in the reserves and those who are working at the corresponding institutions of the Academy of Sciences of Ukraine.

But that is only part of the problem. As I have already stressed, a large portion of the scholars are concentrated at educational institutions. It has turned out that the scientific-research departments of the higher educational institutions are just a trampoline for moving on to the departments. The reasons are concealed in the insignificant material and moral vested interest in purely scientific work—the lower salary compared to the same teacher, the less favorable conditions for working in scientific collaboration, etc. The situation is unfortunately the same today when forming the centers. It is highly necessary to create suitable conditions for the transition of scholars to scientific structures, and such proposals have already been submitted for consideration more than once.

Next to that stands the question of permission to work in two jobs at once. It is entirely proper that a teacher, given the time and the scientific intellect, performs scientific-research work at the institute and, on the contrary, thereby acts as a scientist. But there needs to be a clearly devised economic mechanism for that—a salary, the appropriate monitoring that rules out abuses.

I would thus like to emphasize that the rumors regarding the fact that the scientific centers will somehow ruin the higher educational institutions have no grounds whatsoever. There have to be equal and mutually advantageous relations between the educational establishments and the centers. It is another matter if the base of the higher educational institution at which the NTs is being created does not permit the latter to fulfill its task, as I was saying before.

As for the other structures... Believe me, the practice of scientific work suggests that the so-called lower-level institutions—the scientific centers, sector institutes; that is, those where the concrete scientific work on concrete tasks is being done—can be active.

Everything that exists at the top is administrative structures, and I dare say they are superfluous. They have no base whatsoever, but they have many supervisors that do not have the right to make decisions; they add nothing but grief to the work.

I always cite this example to my opponents when questions of responsibility and subordination are being debated. There is a center for strategic studies at the U.S. Naval War College. It is subordinate to the chief of staff of the Navy. And there is nothing so terrible in that!

The higher-situated structures have to be helpful to us from the standpoint of seeking people who are able to give us real assistance, for example in performing expert scientific appraisals, coordination of efforts, the postulation of tasks.

A council of the heads of the scientific centers has been created in the Main Directorate for Military Education at my request. Such a council of specialists, and not positions, is all we need.

You noted fairly that while resolving tasks that are essentially in the interests of the branches of the armed forces of Ukraine, the scientific centers are not directly linked with them, and the commanders do not have contacts or influence on the scientists accordingly. The question arises of why bother at all, if the centers are being left to the side on a purely formal plane?

[Vachayev] So what is to be done?

[Safronov] The way out here is in the fact that the branches of the armed forces have to be legally independent and capable, and have the right to make assignments and decisions. The financing and ordering of scientific work of a basic and applied nature should come from them.

There is still nothing of the sort. The scientific center today has five or six supervisors over it from various structures. What will happen if each of them gives us a task, knowing in advance that they will bear no responsibility for it whatsoever?

But all of thus will sort itself out, if the truth is mastered over and over that science should work for the needs of the troops. For example, whoever needs a new model of hardware or for whom other requirements have arisen for scientific and technical support, should pose the task, and we should be responsible to them and no one else. Only in that case will efficiency be achieved in the work of the center. To take a different way is to expend both time and money in vain.

[Vachayev] Thank you for the frank discussion.

A necessary afterword. During the discussion of the problems that were covered in the interview, we were joined by the chief of the NTs at the Kiev Institute of the Ground Forces, Candidate of Technical Sciences and Senior Scientific Association Colonel Oleh Kutovyy. It turned out that the same, first and foremost organizational problems also exist in the scientific subdivision that is headed by Oleh Pavlovych. The procedure for financing the activity of the center has also not been settled, and the great potential of the scientists is not being taken into account.

NARODNA ARMIYA intends to continue the discussion not only of the overall problems of the functioning of the scientific centers in the armed forces of Ukraine, but also of the place and role of military science in the emergence of the military-industrial complex of Ukraine in general. We ask all concerned individuals to join the discussion.

## Role of Military at Industrial Enterprises

94UM0322A Kiev NARODNA ARMIYA in Ukrainian 26 Mar 94 p 2

[Article by Lieutenant-Colonel Oleh Vachayev, correspondent of NARODNA ARMIYA, under the rubric "The Defense Rep ['Oboronka'] Must Work for Defense": "These People Are Not Superfluous, or Concerning Urgent Problems With Respect to the Function of Military Representations at Ukraine's Military-Industrial Complex Enterprises"]

[Text] Until quite recently, very little was known about them. The inordinate level of secrecy regarding everything being done in the defense industry ["oboronka"] was quite exasperating. This may have given rise to the stereotype about the specialist from the military VTK being no more than an inspector who stands at the end of the plant conveyor with a ruler in his hand...

There is no point in denying that this stereotype is still with us. Especially as there is currently no need to stand near the conveyor: there are few orders and the enterprises are not working at capacity. From time to time, you even hear that the military acceptance officer [pryyomok] should not be there at all. I am in no doubt whatsoever that this kind of thinking is tantamount to finishing off the job of destroying the once powerful military-industrial complex [VPK], which is hardly going through the best of times today in any event...

In reality, the situation is quite different. At all events, that is certainly true of the Ukrainian Defense Ministry's military representation headed by Colonel Anatoliy Klimov. These military representatives work at the world-renowned O.K. Antonov Aviation Scientific-Technical Complex. Allow me to remind everyone what the "Antonov," as it is known the world over, represents at this time.

The function of this enterprise is to create new models of aviation equipment. This means designing and building experimental models, testing them on the ground and in the air, and as the patent-holder, supervising [avtorskyy

suprovid] the series production and operation of transport and assault-landing transport airplanes, special-purpose airplanes for both civilian and military use, carrierairplanes of aerospace systems, passenger and freightand-passenger carriers, and, lastly, ultralight aircraft. A great deal of attention is also devoted to conversion.

The "Antonov" is also a powerful scientific-research and experimental base with design subdivisions, experimental production, and a flight research and proving base with an airfield complex.

Most of what has been created or is now being created at the Antonov Aviation Research-Technical Complex [ANTK], is, as they say, out in the open—in other words, it is flying over our heads. The AN-22 Antey, the AN-124 Ruslan, the AN-225 Mriya, and, finally, the AN-70 are all creations of this complex.

This short digression was necessary not so much to give the "Antonov" its due (this is a subject for a separate discussion), as to show the wide range of responsibilities facing the military representation at the ANTK, whose job it is to supervise the new models through all the stages [of development and production]. In addition to the specialists responsible for the big projects, there are also those who work in specific fields—as radio operators, mechanics, weapons operators, etc. This requires mastering the basic specifications and a great number of All-Union State Standards [GOST's]. In addition, it requires the ability to establish contacts and work with dozens of civilian specialists, both in the design bureau and in experimental production. Obviously, this cannot be achieved immediately. Experience shows that a military representatives needs to work at least two years in a firm in order to become fully conversant with his duties, while a group chief needs even more time. In the end, however, such specialists in the defense industry are worth their weight in gold. Small wonder that the military representatives were always greatly valued at the enterprises of the military-industrial complex. That is why they were always provided with the necessary conditions in which to do their jobs...

Indulging in another brief historical digression, it should be noted that throughout the entire period of existence of the former Union, the military representations at enterprises of the military-industrial complex, such as the ANTK, were relatively independent subunits. Subordinated, as a rule, to their own command (the Main Staff of the [relevant] branch of the Armed Forces), they coordinated their activity with the directorate of the branch of the Armed Forces that had placed the order and with the relevant ministry of the defense sector of industry. This made it possible for them to define more clearly their own responsibilities and tasks, as well as establish a strict chain of command for reporting and determining responsibility for any given model.

It is understandable that due to our well-known difficulties, independent Ukraine is not yet in a position to build a similar system, although, according to the many experts with whom we spoke, it will be necessary to make the underlying principles of such a system our goal. Meanwhile, following some confusion as a result of our having begun to build our own Armed Forces, a system has been adopted in which all the military acceptance officers from all branches of the Armed Services and types of troops are concentrated in the Staff Directorate for Armaments of the Armed Forces of Ukraine, which simultaneously functions as the principal or general buyer from the military-industrial complex. This has made it possible to reduce the number of acceptance officers by 37 percent.

It is still too early to say which form of subordination of the military representations is best. Competent specialists now head the service of the chief of the armaments staff of the Armed Forces of Ukraine (this view is shared by many with whom we spoke), and they are capable of finding the most effective solution.

And that is not all. For a long time, the military representations operated in accordance with the norms that existed in the former USSR, which were inconsistent with the changed conditions. Finally, after much hard work, the Cabinet of Ministers of Ukraine issued a decree on the procedure for the organization and interaction of the military acceptance officers with industry, and a document was approved on the military acceptance officers, which includes all the latest demands on this organ and deals with all matters pertaining to production quality control.

In short, for the time being, the military representations seem to have been given an official "O.K." to exist. But when we recall that for the present Ukraine's military-industrial complex is not working at capacity and that there are serious questions regarding its prospects for the future, it might appear at first glance that the acceptance officers have been left with nothing to do. There is no use denying that this circumstance has been exploited to the fullest by some opponents, including by some who aspire to power, to argue in favor of pulling apart the military-industrial complex, in favor of privatizing it, which means ruining all the structures of which it is comprised.

Unfortunately, some evidence cannot be denied. Returning to the problems of the ANTK, we should note that while there exists a program for the development of civil aviation, not a word has been said so far about the development of military aviation. But even in these conditions, to talk of there being no need for military acceptance officers is to indulge in dilettantist thinking.

"No self-respecting country in the world dispenses with the services of military experts in creating new models of civilian equipment," said General Viktor Vashchylin, the chief of the Directorate for Industrial Orders and Ties with Industry of the Armaments Staff of the Armed Forces of Ukraine. "Because it is a well-known fact that the military has the strictest and most up-to-date standards."

The Antonov ANTK is just such a firm. Everyone here is very well aware that the military representatives are essential. Colonel Klimov told me that the need for scientifictechnical supervision on the part of the Ministry of Defense of Ukraine in the creation and operation of aviation equipment became an issue here as far back as the year before last. This quickly resulted in the approval of an

interdepartmental decision on retaining and enhancing the functions of military representations in Ukraine. Allow me to quote in full the conclusion of this document: "That at Ukraine's enterprises, quality control and acceptance of production that is being produced to meet the needs of civil aviation shall be effected by military representations (emphasis mine—O.V.). The military representations shall perform the functions of an independent inspection of the Aviation Register as part of the system of certifying aviation equipment, its development, testing, production, repair, and operation."

In other words, they have finally officially found a suitable job for the military representatives. However, there is one "but" here. The implementation of this decision requires cooperation between all concerned ministries and departments. So far, such cooperation does not exist. For the military acceptance officer, it is important that this interaction occur at the state level, and not only on a bilateral basis. In other words, it is a matter of restoring that clearly defined system, in which it was not the firm, which, metaphorically speaking, presented its bill to the ministry, but in which the ministry fed the firm and the military representation worked on a specific order.

...They tell the story of a visit to the ANTK a few years ago by a well-known American industrialist. When asked where the "Antonovites" should go to find highly skilled personnel—without whom the future of the firm is inconceivable—the American told them quite seriously: you need not go anywhere—hire the military representatives.

Clearly, his words contain a grain of truth. And not only because these people are truly specialists of the highest order. The fact is that officers reach the peak of their creative powers and potential at an age when they are due for transfer into the reserves. We need decisions to be adopted immediately that would enable us to preserve this truly golden fund of our military-defense complex. And, incidentally, also solve many other needs of the military representations, such as those, for example, associated with developing a methodology for selecting personnel, summarizing work experience and sharing information, not to speak of alleviating the hardships of our everyday life. In other words, these people are not at all superfluous; they are directly involved in strengthening the might and the building up of the defense shield of our state.

#### **BALTIC STATES**

Estonian Armed Forces Service Law Passed 944K0959A Riga THE BALTIC OBSERVER in English No 11, 17-23 Mar 94 p 2

[Article by Ildar Nizametdinov: "Law on Service in Defense Forces Passed"]

[Text] Last week the Estonian Riigikogu (parliament) passed the law "On Service in the Defense Forces". Many issues of organizing state defense and the functioning of defense institutions are not regulated by present laws. The new law is intended to fill this vacuum.

According to the new law, service in the defense forces is compulsory for all male citizens of the Republic of Estonia (foreign citizens and non-citizens are not conscripted to the Estonian Army).

Active military service from eight to 12 months (the precise term is set by the government regarding the kind of troops and the tasks of a military subdivision) is required of young men from the ages of 19 to 27. Those who have finished active service are entered into reserve and in the future can be conscripted to military training.

Volunteers can start their service at the age of 17. The law also provides for alternative service for those, who due to ideological or religious reasons, do not want to take weapons in their hands. This kind of service is organized by military units and lasts from nine to 15 months.

Due to some family or other serious circumstances, service can be interrupted for a period of up to six months. Persons who have finished the service can continue on a contract. Women from the age of 19 to 40 can also serve in the army on a contract basis.

During discussion of the draft law, the maximum age for conscription was reduced from 30 to 28 years after the proposal of the Liberal faction. Secondly, the opposition factions achieved reduction of the maximum term of service from 18 to 12 months.

However, the Royalist faction's proposal to free people with advanced degrees from military service did not receive the necessary support. During the Soviet period they were not conscripted to active service, although they had to cover military education in special military departments in the universities. Defense Minister Indrek Kannik also has not served in the army because of this stipulation.

Deputies of the ruling coalition had the opinion that the army should not consist just of "workers and farmers"; university graduates are also supposed to serve. However, they have the right to choose training to become reserve officers instead of the usual service.

The law also sets the order for conscription into the reserves and the order of financing expenses connected with supplies for general military service. Persons involved in the military service are forbidden to participate in the activities of political parties, political meetings, and demonstrations.

#### CAUCASIAN STATES

# Defense Minister on War Casualties, Reserve Officer Training

944K0989A Yerevan RESPUBLIKA ARMENIYA in Russian 29 Mar 94 p 1

[Report by A.Ye.: "The Loss Ratio Is One to Eleven"]

[Text] On 27 March, Prime Minister G. Bagratyan signed a decree on organizing and holding in the second quarter of 1994 a training session for reserve officers and those liable for call-up. This event, as well as the scheduled spring draft, was the topic of a conference convoked yesterday by the government.

The conference chairman, Minister of State Vazgen Sargisyan, divided the agenda into two parts. The first was devoted to measures on organizing the draft. The greater portion of the time was allocated for this topic; the second topic was combating desertions.

In his introductory remarks, the minister of state noted that the upcoming draft will take place in much more favorable circumstances than the previous one. He enumerated by name the heads of local administrations who have completed the plans for training sessions. The directness with which he made public the names of top rayon officials who failed in the conduct of last year's draft was supported by argumentation confirming the inadequacy of local authorities.

The address of military police chief V. Khorkhoruni dealt with the problem of draft dodging. According to him, thanks to the work of competent organs, more than 85 percent of deserters from the last draft have returned to military units. There are reasons to believe that this percentage will increase, and, conversely, the figures reflecting the scale of desertions will decline.

The most significant part of what Minister of Defense Serge Sarkisyan said in his address was the figures on the Armenian forces' losses over the period since the beginning of October of last year. Over this period of time, we lost 690 soldiers. During the same time, Azerbaijani forces' casualties amounted to 8,000 killed, 25,000 wounded, and 1,000 missing in action.

Among others who addressed the conference were the Ministry of Defense's chief of mobilization department, Arutyunyan, Minister of Internal Affairs V. Siradegyan, and Yerevan City Council Chairman V. Khachatryan. Prime Minister Grant Bagratyan also had the floor. The conference wrap-up was conducted by Republic of Armenia's vice president, Gagik Arutyunyan.

## **ARMS TRADE**

#### Weapons Deliveries Proposed To Clear Foreign Debt

944Q0275A Moscow KOMMERSANT-DAILY in Russian 24 Mar 94 p 4

[Article by KOMMERSANT-DAILY commentator S. Tsekhmistrenko, under rubric "Problem of Arms Export": "Monopolist Paves the Road to the Market With Good Intentions"]

[Text] When, for the purpose of increasing the effectiveness of weapons export, the single Rosvooruzheniye State Company (general director Vladimir Samoylov) was created late last year, it was assumed that the company's chief task would be not only the restoration of state monitoring of that specific type of foreign-economic activity, but also making it easier for direct producers to gain access to foreign markets. It was repeatedly proclaimed that, in exchange for acting as a middleman, Rosvooruzheniye would receive the commission that is customary in that sphere (3-5 percent of the total value sold). However, from the very beginning one could easily discern the new company's striving to achieve a monopoly, in which the producers see a threat to their independence not only in the foreign markets, but even in arms production itself. That tendency may become intensified: as has become known to KOMMERSANT-DAILY, at the present time the Russian government is considering a plan to provide Rosvooruzheniye with interest-free credit for a total of one trillion rubles for a three-year period in order to use weapons shipments to pay off the Russian state debt to a number of Asian states. In the opinion of KOMMER-SANT-DAILY commentator Sergey Tsekhmistrenko, in the event of a positive resolution of this question, the

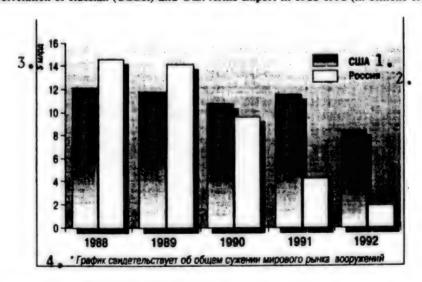
producers, practically speaking, will be deprived of the opportunity to exert any kind of influence on weapons export.

# Production Is Nothing, Acting as a Middleman Is Everything!

The creation of Rosvooruzheniye was influenced primarily by the fact that the abolition in 1990 of the state monopoly on military-technical cooperation (VTS) had a rather large number of negative consequences. Several of the factually independent foreign-trade associations that appeared in the foreign markets (although, organizationally, most of them were part of the MVES [Ministry of Foreign Economic Relations]) began aggressively to lure clients from one another, and that inevitably led to dumping, and, not infrequently, also, in general, to a loss of customers, together with whom entire sectors of the market were also lost. Something that became a classic example was the sale of MiG-29's to Malaysia, when Oboroneksport and Spetsvneshtekhnika fought for the right to become the supplier. There were also rather frequent instances of unsanctioned export, and the sensationalistic story with the appearance of the latest T-80U tank in Great Britain is only the tip of an iceberg, the bulk of which is concealed from the public. Under these conditions one could welcome the restoration of the state monopoly of VTS. if it were not for one circumstance: monopolism in Russia most frequently took on the form of ugly mutations, a form that was far from what was expected,

If one analyzes the experience of trade in weapons abroad, one can see that, practically everywhere, the producer stands in first place, while the middlemen (who, most frequently, are paid from the budget) who are working on commission only help to obtain the necessary state licenses

#### Correlation of Russian (USSR) and U.S. Arms Export in 1988-1992 (in billions of dollars



#### Key:

- 1. United States of America.
- 2. Russia.
- 3. Billions of dollars.
- 4. The graph attests to the overall narrowing of the worldwide arms market.

and authorizations, and also to find foreign agents. Something similar (and good) was also in people's minds during the creation of Rosvooruzheniye, with the producers harboring the hope that they themselves would determine the export price of their output and would independently make settlements with the budget after the payment of the commission to that company. Actually, however, for the time being things seem to be turning out just the other way around, and in this regard one can assume that if the rumors about the credit are not devoid of foundation, then the situation will develop as follows.

After receiving credit, Rosvooruzhenive will actually be able to use it to pay for the production of the arms that are necessary to pay off the debt to the militant Asians. But even in this instance the company is also already acquiring the features of the actual owner of what was produced, while the producer-executors are taking the risk of remaining in "happy" ignorance relative to the sale price. But the remaining part of the credit, according to the practice that has developed and has become widespread in Russia (it is only a lazy recipient of preferential credit who does not do this) will most likely be deposited in a commercial bank. The money that has been built up there simply at the expense of the runaway interest will return to the state accounts in the original amount, but not until three years later. The credit recipients, obviously, will attempt to take the path of such well-known firms as LLD and Erlan (one might recall the television commercial, "Today you make a purchase at LLD, and a year from now all your money will be returned to you"), which, incidentally, are playing with inflation for only one inning (that is, one year). Rosvooruzheniye's authorized banks, however, are Menatel, Most-bank, Intermed, and the Moscow National Bank. As a result, the real profit received by Rosvooruzheniye will greatly surpass the modest commission that is generally accepted throughout the world, which commission was previously mentioned.

# I'll Give You a Trillion, but I Don't Answer for the Consequences

In the story with credit there is yet another curious detail. All things considered, Rosvooruzheniye intends to become the authorized agent of the Russian government in paying off the foreign indebtedness. Although the company has absolutely no right to do this, since it is stated in its charter that, with regard to the state's obligations, it is not responsible (incidentally, as strange as it seems, the government also is not responsible for Rosvooruzheniye's obligations. In this entire scheme, which at first glance seems to be hypothetical, it is not clear as to whether the Asians themselves are interested in the wave of shipments of Russian weapons that are ready to come crashing down on them at any moment. MVES experts who wanted to preserve their anonymity stated to a KOMMERSANT-DAILY commentator that, in their opinion, the rumors that have been intensively spread in the SMI [mass media]. to the effect that the Chinese are sleeping and see themselves behind the controls of dozens of imported SU-27 and SU-30 fighter aircraft, have been greatly exaggerated. Those experts feel that Beijing is counting on either

purchasing production licenses from Russia, or (by inviting individually Russian specialists in the VPK [military-industrial complex] simply stealing the know-how "part by part." Another potential buyer of military technology—Iran—has already assimilated the production of T-72S tanks and BMP [armored personnel carriers], and the sheiks and emirs on the shores of the Persian Gulf who have recently become promising have preferred the French Leclerc tanks to Russian ones.

Something else that attracts attention is the fact that a possible argument that can given by those requesting credit (another one is simply not discernable)—the necessity of the partial prepayment of production of arms for export—to put it mildly is not completely correct. Because during previous years more than a sufficient quantity of arms for export was already produced. Thus, according to data provided by the Ilyushenko Commission, which last year verified the activities of the MVES in arms exporting, the amount of weapons produced in 1992 specially for export came to a total of \$3.1 billion, but arms with a total of only \$1.1 billion were delivered to foreign customers. The rest of the weapons continue to gather dust in depots (some of those arms have already been paid for—approximately \$1 billion worth).

In the opinion of the MVES experts who were mentioned, by pursuing the good goals of helping the enterprises in the military-industrial complex and compensating their production expenditures, Rosvooruzheniye is choosing not the most effective means. Incidentally, another alternative is not precluded: the mentioned MVES experts, by representing the interests of Rosvooruzheniye, are attempting to lobby in their favor at the very moment when, in the apparatus of First Vice-Premier Oleg Soskovets, the government's opinion concerning the future of the exporter monopolist is being worked out.

Basic Weapons Exporters in 1992 (see Note) According to SIPRI [Stockholm International Peace Research Institute] Data (in billions of dollars)

Country	Percent	billion dollars
1. United States of America	45.78	8,429
2. Russia	11.1	2,043
3. Germany	10.47	1,928
4. China	8.34	1,535
5. France	6.25	1,151
6. Great Britain	5.17	0.952
7. Czechoslovakia	4.23	0.779
8. Italy	1.82	0.335
9. Netherlands	1.65	0.305
10. Sweden	0.61	0.113
11. Remaining exporters	4.57	

Note: Figures for worldwide arms export for 1993 have not yet been totaled.

## FOREIGN MILITARY AFFAIRS

Russo-Japanese Military Contacts Described PM0804100194 Moscow ROSSIYSKIYE VESTI in Russian 6 Apr 94 p 3

[Report by Aleksey Balandin: "First Visit by Russian Military to Japanese Military Unit. Symposium on Security in Asian-Pacific Region Held in Tokyo"]

[Text] Tokyo—Twice now, since the beginning of the year, senior officials of the Russian Defense Ministry and General Staff have visited Tokyo. The first occasion was at the beginning of February to participate in an "unofficial" Japanese-Russian-American symposium on security in the Asian-Pacific region, and also fully official consultations "on foreign policy planning" on the basis of bilateral accords. The second occasion was at the beginning of March, to participate in a bilateral symposium of military people from the two countries on security matters.

It appears that contacts between military people from the two countries will not end there. The Russian side has a direct interest in developing the dialogue. The Japanese too appreciate the need for it in an altered world situation. Although they are acting somewhat hesitantly at the moment. What bothers them is that political relations between the two countries are not settled—the fact that, in Japan's view, the territorial question is unresolved and there is no peace treaty as a result. The marked diffidence in the dialogue between the military people can also be put down to residual elements of the old mentality.

All this was clearly demonstrated by the March symposium, which was described as an "academic" event under the auspices of the scientific research institute of defense. There was an exchange of opinions at it on two basic questions—the problem of security in the Asian-Pacific region and the two countries' military doctrines.

In fact, the question of creating a collective security system in Asia was under discussion in the Soviet period. But then, in the conditions of East-West military confrontation, the main aim was to bring down the two sides' levels of confrontation. Now, following the collapse of the Cold War system, this idea has been modified. Russian has declared in its military doctrine that it has no enemies. It has moved to reduce its Armed Forces and convert military enterprises. In view of this, the question of a coordinated policy in the security sphere has come to the fore.

For the purpose of creating a security system in Asia, the Russian representatives proposed drawing on Europe's experience. Such a system already exists there in some degree. At the same time they appreciate that the European experience cannot be automatically transferred to Asia. It is more realistic to take the path that leads via the

development of bilateral relations to the creation of subregional security systems, for example, in East Asia, with other areas of the continent joining it subsequently.

But this is, so to speak, the strategic aspect of the problem. In terms of content, Europe's experience appears more feasible. If you begin with confidence-building measures—exchange of information, notification of the transfer of forces and of military exercises—you can go beyond the confines of mutual distrust and move over to the formation of close political positions on questions of deterring the aggressor and peacemaking actions in the region's trouble spots.

It appears that the Japanese side has not yet established a clear-cut position on this question. Its strategy is based on the Japanese-American security treaty that envisages the U.S. Armed Forces' participation in repulsing aggression against Japan. The actual treaty gradually begins to lose its significance, according to some experts, Japanese among them, when confrontation between the USSR and the United States is a thing of the past. But they note the apparent trend toward a review of the parameters of the U.S. military presence in Japan and the role of the Japanese "Self-Defense Forces." In our view, the treaty has a right to exist insofar as it contributes to maintaining peace in the Asian-Pacific region. Moreover, it is not inconceivable that this treaty might develop into a collective security system as other countries join it.

The March symposium and the reactions to it in the Japanese press showed that the problem of North Korea's creation of nuclear weapons is Tokyo's chief concern. This has prompted pronouncements about the need to "pres-Pyongyang by applying economic sanctions. But the Russian side believes that the presence of a potential to create weapons and the possession of these weapons are different things. It follows, therefore, that the DPRK must not be allowed to feel that its security is compromised at all. A policy of pressuring North Korea and creating a vacuum around it can only have the opposite effect, and incite it to accelerate the creation of nuclear weapons. What is needed is dialogue with Pyongyang. And the way is clear. Not without the participation of Russian diplomacy, it was decided to place seven North Korean facilities under IAEA supervision.

The Japanese side is evidently still ill-informed about these efforts. But such events as the March symposium help to plug the information gap on both sides. As well as attending the symposium, the Russian delegation visited the Japan Defense Agency and also inspected the social and consumer facilities of the first division of the Japanese ground "Self-Defense Forces." Incidentally, it is the first time the Russian military has ever been to where a Japanese military unit is stationed.

The previous symposium of this kind took place in Tokyo one year ago. It is to be hoped that the military dilaogue will not dry up, but will become an essential part of the fabric of Russian-Japanese relations.

BULK RATE U.S. POSTAGE PAID PERMIT NO. 352 MERRIFIELD, VA.

This is a U.S. Government publication. Its contents in no way represent the policies, views, or attitudes of the U.S. Government. Users of this publication may cite FBIS or JPRS provided they do so in a manner clearly identifying them as the secondary source.

Foreign Broadcast Information Service (FBIS) and Joint Publications Research Service (JPRS) publications contain political, military, economic, environmental, and sociological news, commentary, and other information, as well as scientific and technical data and reports. All information has been obtained from foreign radio and television broadcasts, news agency transmissions, newspapers, books, and periodicals. Items generally are processed from the first or best available sources. It should not be inferred that they have been disseminated only in the medium, in the language, or to the area indicated. Items from foreign language sources are translated; those from English-language sources are transcribed. Except for excluding certain diacritics, FBIS renders personal names and place-names in accordance with the romanization systems approved for U.S. Government publications by the U.S. Board of Geographic Names.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by FBIS/JPRS. Processing indicators such as [Text] or [Excerpts] in the first line of each item indicate how the information was processed from the original. Unfamiliar names rendered phonetically are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear from the original source but have been supplied as appropriate to the context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by the source. Passages in boldface or italics are as published.

SUBSCRIPTION/PROCUREMENT INFORMATION

The FBIS DAILY REPORT contains current news and information and is published Monday through Friday in eight volumes: China, East Europe, Central Eurasia. East Asia, Near East & South Asia, Sub-Saharan Africa, Latin America, and West Europe. Supplements to the DAILY REPORTs may also be available periodically and will be distributed to regular DAILY REPORT subscribers. JPRS publications, which include approximately 50 regional, worldwide, and topical reports, generally contain less time-sensitive information and are published periodically.

Current DAILY REPORTs and JPRS publications are listed in *Government Reports Announcements* issued semimonthly by the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161 and the *Monthly Catalog of U.S. Government Publications* issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

The public may subscribe to either hardcover or microfiche versions of the DAILY REPORTs and JPRS publications through NTIS at the above address or by calling (703) 487-4630. Subscription rates will be

provided by NTIS upon request. Subscriptions are available outside the United States from NTIS or appointed foreign dealers. New subscribers should expect a 30-day delay in receipt of the first issue.

U.S. Government offices may obtain subscriptions to the DAILY REPORTs or JPRS publications (hardcover or microfiche) at no charge through their sponsoring organizations. For additional information or assistance, call FBIS, (202) 338-6735,or write to P.O. Box 2604, Washington, D.C. 20013. Department of Defense consumers are required to submit requests through appropriate command validation channels to DIA, RTS-2C, Washington, D.C. 20301. (Telephone: (202) 373-3771, Autovon: 243-3771.)

Back issues or single copies of the DAILY REPORTs and JPRS publications are not available. Both the DAILY REPORTs and the JPRS publications are on file for public reference at the Library of Congress and at many Federal Depository Libraries. Reference copies may also be seen at many public and university libraries throughout the United States.

# END OF FICHE DATE FILMED 4 MAY 1994